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ABSTRACT

One of twelve instructional units in the Native American Career Education (NACE) program, this unit is intended to help Indian junior high school students understand some of the principles which govern cultural change and to show how it is possible to adapt to change while retaining essential cultural elements. The five activities in the unit include reading, mapwork, games, and a community planning exercise to focus on differences and similarities in the ways in which basic needs are met at different periods in a culture's history and on the corresponding effects on lifestyles, roles, and careers within the culture. Related subject areas are history, geography, mathematics, transportation, and industry. Each activity includes objectives, student materials, and suggestions to the teacher on how to use them. Student exercises consist of readings, questions to answer, games, simulations, project instructions, and other learning activities. Each activity is followed by suggestions for ways of extending learning and, where appropriate, additional resources are described. Student materials may be used as master copies for reproduction or as models for material development. A test designed to measure student mastery of the main objectives is included with each unit, along with an answer key. (A guide for the whole twelve-unit program is also available--CE 014 035.) (TA)

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THE COMMUNITY IN TRANSITION

Native American Career Education

Unit

We would like to thank the R-3 Project of the San Jose Unified School District for permission to adapt the game included in Activity 4 of this unit.

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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This document is one of a series of teaching/learning units dealing with Native American Career Education. The titles of all individually available documents in this series appear below:

Career Awareness units
Part of the Whole World
Cooperation
From Idea to Product
The Community
The Community in Transition

Career Orientation units
Putting Your Money to Work
Living with the Land
Working for the People

Career Exploration units
Planning
Putting It All Together
Getting Ready for Jobs
The Career Fair

and

Native American Career Education,
A Curriculum Guide

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Foreword

The Native American Career Education Program consists of twelve units designed to address the specific needs and aspirations of Native American students. It includes teacher and student materials, evaluation materials, and a Curriculum Guide.

These units employ a variety of learning activities. They are designed to: 1)bridge the gap between traditional and technological societies by identifying the parallels between them and exploring the values they represent; 2) create an understanding of the economic context within which career choice takes place; 3) foster personal and interpersonal skills necessary to function in the world of work; and, 4) develop career exploration skills.

Development has been based on the recognition that the needs of Native American communitites differ greatly from those of the larger American society. In these communities, as in third world countries, problems are not due to a lack of natural resources, but rather to a lack of meaningful development of human resources which would allow for additional economic development and self-determination of Native American communities.

In order to identify and meet these needs, information has been gathered from Native American communities, students, teachers, and tribal groups, and the materials have been developed with the guidance of an advisory committee of Native Americans.

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Preface

An Indian student should study and learn about the various careers available so that he or she can decide what career goal to pursue after leaving school. This will also give him or her an additional reason to complete that education. The Indian student should try to achieve this career goal so that after returning home he or she can help make his or her own community a better place to live.

In the unit, "The Community in Transition," the development of an imaginary tribe of Indians is studied-- from hunter-gatherers, to an agricultural village, to a reservation near a rural small town which becomes a large city, to the point where the tribe begins to develop its own natural and human resources. The Indian student will see the adaptations that the tribe has to make, just as all Indian communities have had to learn to adapt to change while still retaining their own cultural values.

In order to survive, all Indian tribes have had to choose the best of both Indian and non-Indian culture. So, the Indian student must take advantage of educational opportunities and become competent in a career. Though a given career may not seem relevant to Indian culture, the student should become even better at it than a member of the dominant society has to be, so that he or she will have a firm foundation from which to adapt the knowledge and skills involved in the career to his or her own Indian culture.

Lucille J. Watahomigie
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Contents

This book includes all information and student materials needed for the unit, "The Community in Transition." In some activities, students will be asked questions which they must answer in writing. Many of these questions have no single "right" answer. For your convenience, some sample answers have been printed after each set of reproduced questions.

At the end of this guide, you will find an annotated resource list. This has been included to help you locate good, appropriate audio-visual materials in order to stimulate student interest in the unit and to enrich their individual learning experiences.

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An Overview Of The Unit

General Purpose

The Community in Transition is one of twelve units in the Native American Career Education program. The general purpose of this unit is to help Native American students understand some of the principles which govern change and to show how it is possible to adapt to change while retaining essential cultural elements. The unit focuses on the evolution of lifestyles and the corresponding effects on roles and careers.

Goals and Objectives

In this unit, there are five Activities. Each Activity has a specific goal and a specific objective. These are as follows:

Activity 1: *The Wanderers*

GOAL:	To introduce the idea that human communities have certain basic needs and that they must work together in order to meet them.
OBJECTIVE:	Students will read an article and play a game which focus on the survival needs of a hunter-gatherer culture and what individuals must do to meet those needs.

Activity 2. *The Village*

GOAL:	To introduce the idea that changes in environment cause changes in culture and life-style, and to present students with basic facts about a simple agricultural culture
OBJECTIVE:	Students will practice predicting what cultural changes will occur as a result of given environmental changes, and will study the nature of a simple agricultural culture and its similarities to and differences from a hunter-gatherer culture.

Activity 3. *The Town*

GOAL:	To introduce the idea that introduction of new techniques and resources can cause changes in culture and life-style, and to outline the socio-economic structure of a small town in a rural area
OBJECTIVE:	Students will study the history of a tribal culture after the coming of Europeans and a description of life in the culture in 1940, and will identify similarities and differences in life-style as compared to the earlier agricultural culture.

Activity 4. *The City*

GOAL:	To help students understand the basic economic structure of an urban community
OBJECTIVE:	Students should be able to identify some of the ways that residents of an urban community meet their needs.

Activity 5. *Mapping the Future*

GOAL:	To help students understand how economic and cultural considerations should be applied in planning a community
OBJECTIVE:	Students will read about community planning and apply this and what they have learned in previous Activities to plan a modern Indian community.

Summary

In this unit, students follow a tribe of Indians as they move from the hunter/gatherer stage of development to an agricultural village, a reservation near a rural small town, a large city, and finally a point where they begin to develop their own land in their own way. In order to allow maximum freedom in incorporating cultural elements and historical developments, both the tribe, "The Basketmakers," and the place, "Golden Valley," are imaginary.

A unifying element in the unit is the inclusion of the same basic map of Golden Valley in each Activity. In each case the changes which have occurred at the period being described in the Activity are drawn in. The first map simply shows where certain resources are located. These resources will become increasingly important as the history of the valley unfolds.

Each Activity has at least one reading-and-questions exercise which can be assigned as homework if desired. Other exercises include games and a modified simulation exercise which must be done in class and in which the students will work together in small groups. Each of these exercises is followed by a Review Exercise, in which students answer questions which require them to make deductions from material they have seen or read, put together information drawn from more than one source to form concepts, and in general think about the implications of what they have learned.

The games in Activities 1 and 4, and the simulation exercise in Activity 5, require the students to do a considerable amount of simple arithmetic. This aspect of the unit might make it suitable for inclusion in a mathematics course. The emphasis on maps relates the unit to geography. It might also be used in connection with history or social studies courses, or in connection with any science courses which included anthropology, archaeology or the like.

All units in the Native American Career Education program should be tailored to meet the interests and needs of the individual students in your class. There are many questions, therefore, that you will have to answer yourself. When should the students work in small groups? When will they benefit more from an activity by working alone? Should the worksheet exercises be given to the class as homework assignments or as activities in the classroom? How much supervision do the students require? In answering these questions, be flexible. Shape the unit so that it best suits you, your students, and the amount of time which is available.

Suggestions for each Activity are followed by an Additional Activities section which contains possibilities for expansion on the material in the Activity.

This unit should occupy between 3 and 6 weeks of class time.

Teacher's Note: Discussions

At various points in the instructions you will find recommended questions for discussion. It is not essential that responses to these questions be elicited from the class. With students who are not used to responding verbally, trying to get a general class discussion going may be more frustrating than useful. There are, however, a number of alternative approaches.

The simplest of these is just to talk about the questions, their implications, and some possible answers, in a general way--an informal lecture, in fact. Where time allows, you may ask students to discuss questions with their workgroups, or even put them on the board and have students respond in writing.

Materials:

For this unit you will need:

- pencils and paper for written exercises
- a transparency of the map on page 43 of this Teacher's Guide (optional)
- tape
- scissors
- glue or paste
- 4 sheets cardboard for each workgroup for Activity 1 (optional)
- 1 pair of dice for each workgroup
- 1 marker (stone, empty spool, etc.) for each student
- 1 piece cardboard or stiff paper for each workgroup
- crayons, colored pencils or paints
- 4 pieces of cardboard for each workgroup for Activity 5 (optional)
- several copies of the booklet *Indian Industrial Parks* (optional)
  (order from Indian Industrial Development Office
  Economic Development Administration
  U.S. Department of Commerce
  Washington, D.C. 20230)
- Duplicated copies of student materials as indicated in instructions for each exercise.

Introducing The Unit In Class

On the board, write the words "The Community in Transition." Explain to students that this is the title of the unit which they are about to begin. Ask students what they think a unit with this title would be about. To help them come up with an answer, focus on the two main words in this title--"community" and "transition."

If students have studied previous units in this series, in particular "Part of the Whole World," or "The Community," they should be able to come up with a definition for "community" which covers the points that a community is a group of people who see each other often, usually live in the same area, and who share social and business activities. If not, refer to any local organizations or agencies with the word "community" in their title to help students arrive at the definition.

To help them define "transition," refer to "transportation," etc. until students realize that it must refer to movement-- from place to place, or, in this case, from time to time. With this information, students should be able to deduce that the unit is going to be about a community as it changes throughout its history.

Reading the Poem

If students have not had other units in this program. Read, or reproduce and hand out, copies of the passage from the poem, "old Way, New Way," by David Martin Nez which appears on p. 8 of this book.

Discuss with the students what this passage is saying. Possible interpretations include: 1) that it is important to learn what other cultures have to offer; and 2) that it is important to understand and preserve the beauty of one's own culture.

Introducing the Program

If the class has not had earlier units in this program, when they have finished discussing the Nez poem, write the words *Native American Career Education* on the blackboard. Ask the students to discuss what they think this phrase means. If they have trouble getting started, help them by breaking the concept into parts. Ask questions that will lead the class step by step to a general understanding of the ideas involved. Students should be encouraged to work together in small groups to answer questions like these:

1. What is an American?
2. What is a Native American?
3. What is a career? Can you name some examples of different types of careers? Are there any careers which interest you right now? How do people get started in careers?
4. What do you think that career education is?

5. What do you think that career education for Native Americans is? How might this be the same as career education for other kinds of Americans? How might it be different?
6. Why do you think we are going to study Native American Career Education now? How can this type of education play an important part in your life? What kinds of things do you think you need to learn about careers?

Read, or reproduce and give to students, p. 9 of this book, "What Native American Career Education is all about." Afterwards, ask the students to discuss and expand on what they have read. Focus student attention on certain key ideas by repeating some of the earlier discussion questions. Ask, "How can Native American Career Education play an important part in your life? What kinds of things do you need to know about careers?"

Introducing the Unit

Divide the class into groups and ask them to discuss now what they think this unit is about. During the discussion, ask the students to review the suggestions which you wrote earlier on the blackboard. Encourage them to add to this list any new ideas that they have to offer.

Explain that *The Community in Transition* is about a group of people and how their way of life changes when things around them change. If students do not know what *transition* means, explain that it means something like "the state or process of changing." As they read this book and do the worksheet activities, students will be asked to think about an imaginary Indian tribe and how it changes in response to changes in the area around it. These changes include changes in roles and careers. Students will also be asked to notice how the imaginary tribe keeps certain important cultural elements the same throughout all its changes.

Read, or reproduce and give to students, to read, p. 10 of this book, "What this book is all about." As you review this material afterwards, concentrate on the fact that the main activity in this unit will be the tracing of an imaginary tribe, the Valley people, through a number of changes and stages in cultural development.

As you review the content of "What This Book Is All About," you should also include the following three ideas:

1. Students will be doing a series of exercises which contain questions. By finding the answers to these questions, students will learn how change can affect a community of people.

2. The students will be asked to work together in small groups for many of the activities in this unit. There are two reasons for this. First, small group work has been found to be a good way of doing the types of activities which this unit involves and, second, small group work will expose the students to this kinds of group situations which they will experience on most jobs.

Review

Before beginning Activity 1, review what you have done so far in class. If you have introduced the unit successfully, the students should be able to supply a general answer for each of the following questions:

1. What does Native American Career Education mean?
2. What is the book *The Community in Transition* going to be about?
3. What you will be expected to do in this unit?

These lines are taken from the poem "New Way, Old Way," published by The Writers' Reader, 1964, copyright 1969. Used by permission of the author, a former student at the Institute of American Indian Arts, Santa Fe, New Mexico, a Bureau of Indian Affairs school.

We shall learn all these devices
The white man has.
We shall handle his tools
For ourselves.
We shall master his machinery,
his inventions,
his skills,
his medicine,
his planning;
But we'll retain our beauty
And still be Indian.

David Martin Nez

What Native American Career Education Is All About

All over the country, Indian students, parents, and communities are asking, "Where can we find good jobs?" For too long, too many Indians have ended up with poor jobs or no jobs at all. Career education is one way to change this.

Planning for a career should begin long before you actually start working. But what kinds of jobs are there? What are different jobs like? How do different jobs fit together? How do you find out which job would be best for you? Career education is one way to find the answers to questions like these.

Native American Career Education is a program that has been written especially for Indian students. Indians from many tribes have helped plan, write, and test this program to make it as useful as possible to you. Some of the activities may seem like games. That's because we think learning can be fun. Sometimes even work is fun!

Good luck!

What This Book Is All About

How do human communities meet their basic needs?

What do people do when things around them change?

How can a way of life change and yet stay the same?

If you've ever been curious about questions like these, you should find this book very interesting. In this book, you will follow an imaginary tribe, through several stages in their history. When you first meet them, they will be getting all their food by hunting animals and gathering plants. When you leave them at the end of the book, they will be planning their own modern community to suit their needs.

As you might guess, the tribe's way of life changes a good deal between these two points. It changes because of things that happen to them--changes in the life around them, new people that they meet, and so on. The tribe adapts, or adjusts, to these changes are and why they came about. But you will see, too, that in spite of all the changes the tribe manages to keep many things in their life the same. They do not lose their traditions or ways.

When you have finished this book, you should know:

(1) How a community meets its basic needs.

(2) How a community reacts to different kinds of changes; and

(3) How a community can change its life-style while still keeping its traditions.

Activity 1. The Wanderers

GOAL: To introduce the idea that human communities have certain basic needs and that they must work together in order to meet these needs.

OBJECTIVE: Students will read an article and play a game which focus on the survival needs of a hunter-gatherer culture and what individuals must do to meet those needs.

WHAT STUDENTS WILL BE ASKED TO DO

- Define key vocabulary terms
- Read about the hunter/gatherer stage of the Valley People's culture
- Play the survival game, which is based on a few days in the life of a band of the Valley People
- Answer questions about the Valley People's community based on the reading and the game

MATERIALS NEEDED

- *For Exercise 1, 3, and 4:* pencils and paper
- *For Exercise 1:* a transparency of the map on page 15 of this Teacher's Guide (optional)
- *For Exercise 3:* 1 copy of pages 22-25 of this Teacher's Guide, made into a gameboard, for each workgroup (3-6 students)
- tape to hold gameboard together
- cardboard backing for gameboards (optional)
- a complete set of 24 trade cards (pages 26-28 of this Teacher's Guide for each workgroup
- scissors to cut cards apart
- 1 Individual Tally Sheet (page 29 of this Teacher's Guide) for each student
- 1 Individual Score Sheet (pages 30 - 31 of this Teacher's Guide) for each student

- 1 Group Score sheet (pages 32-33 of this Teacher's Guide) for each workgroup
- 1 die (1 pair of dice) for each workgroup
- 1 marker for each student (markers may be different colored stones, coins with different dates, empty spools of thread painted different colors, cones of colored paper, etc.)

PROCEDURE*

Reproduce and hand out, or make a transparency of the map (see page 15 of this Teacher's Guide) and project it on the wall. Explain to the students that this is the imaginary valley where the Valley People, an imaginary tribe, are living. Tell them that in this unit they will be studying how the Valley People's way of life changes as new resources and new ways of doing things become available. Give students several minutes to look at the map. Point out the locations of the different resources marked on it, as they will become important later. Point out the location of the different kinds of land (plains, marsh, desert, etc.) also.

Explain that in this first Activity the students will be studying the Valley People in their hunter-gatherer stage.

Exercise 1. Word Work

In this exercise, students will be asked to define the key vocabulary terms *transition*, *nomad*, *environment*, *energy*, *culture*, *resource*, and *migration*. Explain that in the remainder of this Activity, and in some of those that follow, students will be dealing with material which will include these words. For this reason, it will be important for students to know exactly what the words mean.

Some of these terms (*environment*, *culture*, etc.) have been covered in other units of this program. If students have had these units, remind them that they have met these ideas before, and advise them to apply what they learned earlier when they write their definitions.

You may have students look up these words as homework, or you may wish to simply list them on the board, talk about what they mean, and have students copy the words and their definitions in their notebooks.

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*Remember that the directions given in this Teacher's Guide are only *suggestions*. Use them to create a course which best suits you, your individual students, and the amount of time which is available.

Make sure students understand what a *definition* is and what they are supposed to do in this exercise. Encourage them to use a dictionary to make sure their definitions are accurate, but remind them to write the definitions in their own words. (If students need any review on how to use a dictionary, give it at this time.)

Students need not use the exact *words* given in the sample answers. Their answers are correct as long as they use the same *ideas*. Discuss for a minute why ideas are more important than words. Then give some examples of the same idea expressed in different words. Go over this matter until students understand the concept, since it can have important effects on their self-esteem now and later. The caution about not having to use the exact words in the book is particularly appropriate in this vocabulary exercise, since the sample answers are in something like a dictionary format and may not be at all close to the actual phrasing students will use.

After students have finished and corrected this exercise, you may wish to go over the answers in class to make sure that all students understand the key terms which they were asked to define in the exercise.

Definitions (meanings) for the words in this exercise should be something like these:

a. transition

Passing from one condition, form, stage, activity, place, etc. to another; the time period when this takes place; change, in the sense of development.

b. nomad

A member of a tribe, nation or race that has no permanent home, but moves around constantly in search of food, pasture and so on; or simply a person who changes his home often, a wanderer.

c. environment

All the conditions, circumstances, and influences surrounding and affecting the development of a person or animal; this includes climate (weather), the land, its resources, other people, and so on.

d. energy

Strength and power to move about, do things, seek food, etc.; also, moving force used to run machines.

e. culture

The ideas, habits, skills, arts, tools, social systems, etc. of a people in a certain time and place; that is, the things a people do and the ways they do them which are different from the ways other peoples do things.

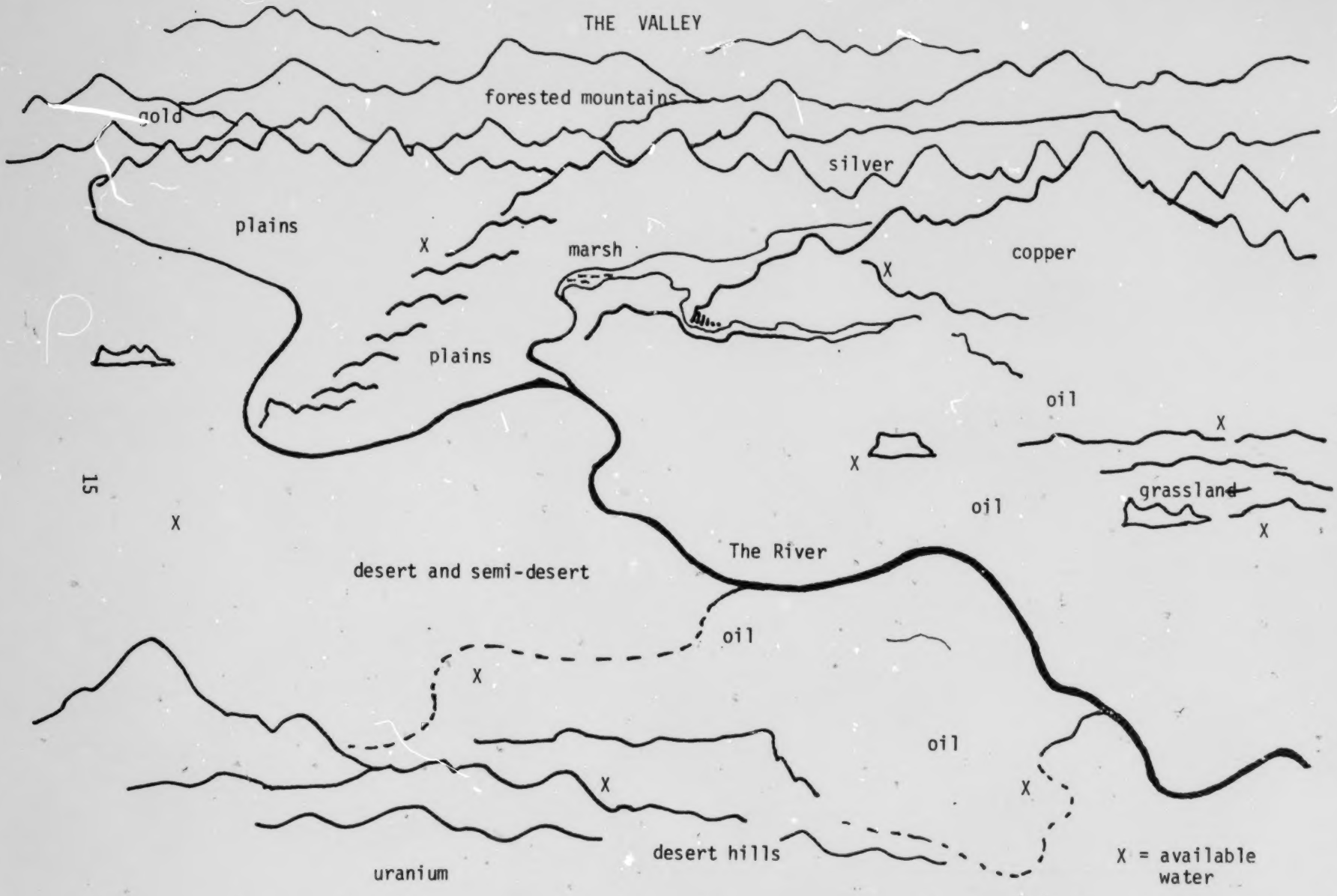
f. resource

Something that can be used or drawn upon to fill a need; something a country or people has that can be used to its advantage.

g. migration

Moving from one place or country to another; moving from one place or region to another with the change of season.

(These definitions are based on the ones given in *Webster's New World Dictionary.)*


THE VALLEY
forested mountains
gold
silver
plains
X
marsh
copper
X
plains
oil
X
X
grassland
oil
X
15
The River
desert and semi-desert
oil
X
oil
X
X
desert hills
uranium
X = available water

Activity1. The Wanderers

EXERCISE 1. WORD WORK

In this Activity you will be meeting some words whose meanings you may not know. The Activity will be easier if you find out what the words mean first. The words are listed below.

If you have had other units in this program, you may recognize some of the words and remember what they mean. If you don't know what the words mean, look them up in the dictionary. Then write their meanings down in your own words..

On a separate piece of paper, write down what each of these words means:

a. transition
b. nomad
c. environment
d. energy
e. culture
f. resource
g. migration

Exercise 2. The Valley People

When students have finished the word work exercise, tell them that later in this Activity they will be playing a game. This game has to do with an imaginary Native American tribe called the Valley People and the things they had to do to keep alive, a long time ago. Before you play the game they should learn something about what the Valley People were like. To do that, they will be reading a description of them.

Remind students that it is important to remember that, at one time or another, almost all human groups have lived the way the Valley People do in this reading. In some environments it is the only way people can live. In order to change, people have to bring in resources or tools from somewhere else.

The kind of country in which the Valley People live is like that of the American southwest (including eastern California, Utah, Nevada, Arizona, and New Mexico). This type of environment is also found in parts of Africa, the Middle East, and Australia.

The map that you showed them at the beginning of this activity shows the valley where the Valley People live and what kinds of land and what resources are available there.

Reproduce and hand out to students copies of the reading on pp. 18-20 of this book, which describes the Valley People and their first way of life. You could also record this and other readings into a cassette tape so that students could hear as well as reading it.

The Valley People

The Valley People are nomads who live by hunting and gathering wild plants. Their home is wide valley between two ranges of mountains. The weather there is usually dry. Much of the valley is desert country, although there are grassy plains near the mountains and among the hills. The river is big and fast-running in the winter, after the rains. In the summer, though, it may almost disappear. There are a few springs and waterholes, and the people know where they all are. At one point, where another stream flows into the river, there is a place where wild birds such as ducks can be found. They rest there when flying north or south in the spring and fall.

The tribe moved into the valley from the north long ago. They call themselves "The People." Because the valley does not usually have enough food at any one spot for large groups of people to live together, the tribe has divided into several small clans. The clans meet two or three times a year for ceremonies, arranging marriages and so on.

Each clan has one camp where their year-round homes are. Their houses are usually round. Each house is made of a framework of small trees and branches with brush and grass are tied to it. When a clan is on the move, they make rough brush shelters instead of houses. Everybody helps in house-building.

All the meat a clan eats is brought in by the men. They set nets or traps for quail and other birds. When they want larger animals, the men usually go out in groups with spears. (Their bows are not very strong.) The men try to surprise and surround deer or antelope. Then they chase the animals into pits, hidden pens, or box canyons and kill them. The men hunt together for success and for safety too, since the larger animals can be dangerous when hurt. When the game animals have been killed, the hunters all help to carry the meat back to camp.

When there is a rabbit hunt, everyone helps out. The women chase the herds of rabbits into nets. The men are waiting there. As the rabbits run into the nets, the men hit the rabbits with clubs. The children help to chase and hit the rabbits with sticks.

The women gather most of the vegetable food. The woman's digging stick is her main tool, just as the spear is the man's. Wild onions and other roots, mesquite beans, juniper berries, piñon nuts, and acorns can all be gathered at the right times of year. Piñon nuts and acorns are very easy to store. For this reason, the clan tries hard to gather a lot of them each fall.

Women also collect plant stems to make baskets, and they tan skins and weave strips of rabbit fur into robes for winter. The children have the job of gathering firewood.

The men also make weapons and tools from stone, wood, and animal bone. When necessary, they use these weapons to defend their families from human and animal enemies.

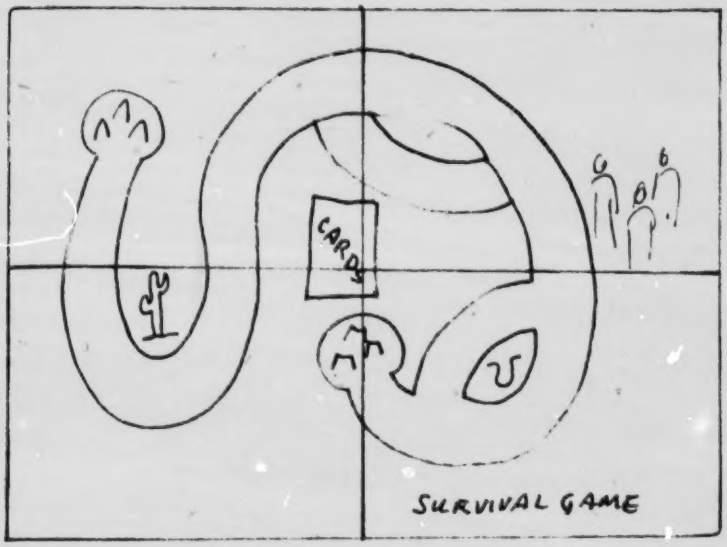
Each clan usually has a chief who decides things like when it is time to move in search of more food and whether the clan should fight someone or not. However, the chief makes his decisions only after find-out what everyone else thinks. He knows he cannot make the people do anything if they don't agree.

There is also usually one older man or woman who has studied physical and spiritual methods of healing. This person gathers herbs and other useful items and treats the sick. He or she also advises the chief.

Exercise 3. The Survival Game

Before you begin this exercise, prepare the materials which students will need for the Survival Game. (Game Instructions start on p. 39.) These materials are are as follows:

1. *The Gameboard.* Masters for the gameboard appear on pages 22-25 of this Teacher's Guide. These pages should be xeroxed or put on ditto masters. You will need one full set (one copy of each of these pages) for each workgroup of 3 to 6 students. When pages have been reproduced, tape each set of four together to form the gameboard. You may want to glue them to a cardboard backing to increase durability. Once made, the gameboards can be saved for use by later classes.



2. *Trade Cards.* Masters for trade cards appear on pages 26-28 of this Teacher's Guide. A complete set of Trade Cards consists of 24 cards (3 master pages, 8 cards per master page). Reproduce one complete set of trade cards for each workgroup. After masters have been reproduced, use scissors to separate the cards from one another. Paste on thin cardboard and cover with cellophane for durability.

3. *Tally and Score Sheets.* Reproduce one Individual Tally Sheet (master on page 29 of this Teacher's Guide) and one Individual Score Sheet (master on pages 30-31 of this Teacher's Guide) *for each student.* Reproduce one Group Score Sheet (master on pages 32-33 of this Teacher's Guide) *for each workgroup.*

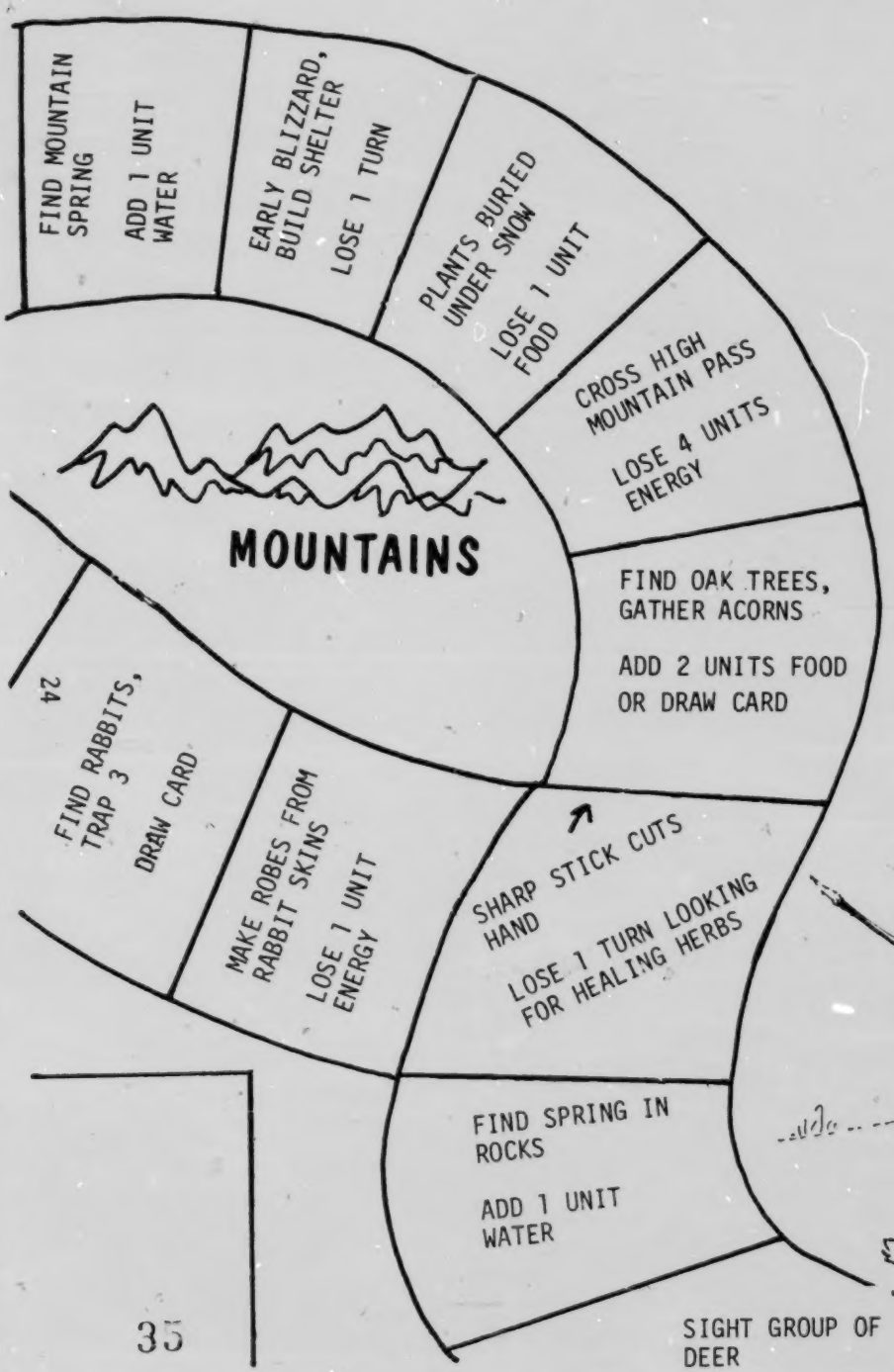
4. *Tokens and dice.* Each workgroup will need one die. Each student will need a marker. Markers can be stones, coins with different dates, empty spools of thread painted different colors, cones of colored paper, etc.

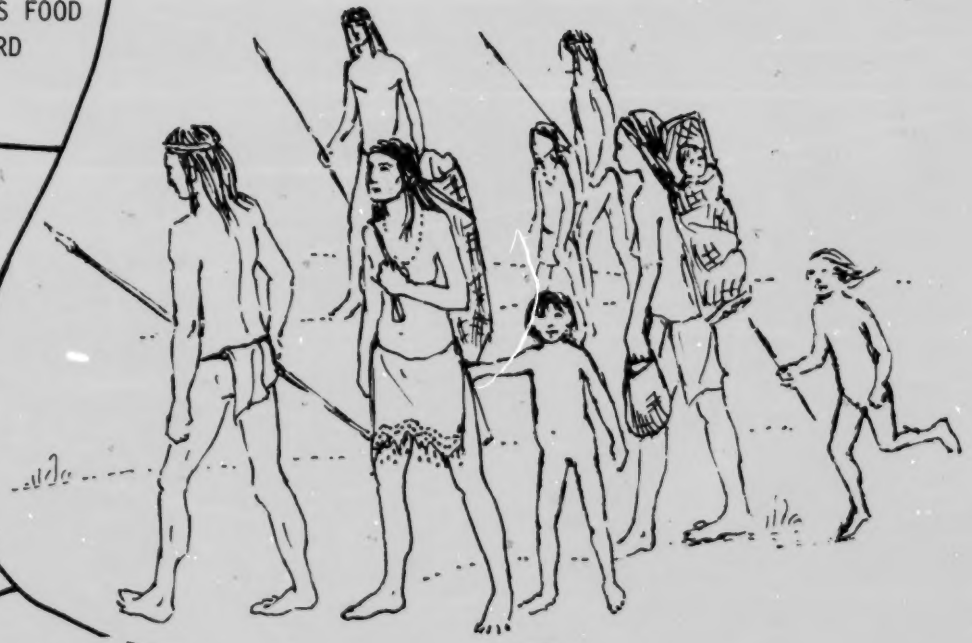
CAMP
FIND RIPE JUNIPER BERRIES
ADD ONE UNIT
LOSE ONE TURN WHILE MAKING NEW SPEAR
REACH WATER HOLE
ADD 3 UNITS WATER
HILLS
SKIP THIS SQUARE ON RETURN TRIP
EVEN NUMBER ON DICE, GO
ODD NUMBER ON DICE, GO
SEE ENEMIES, CLIMB TO AVOID THEM
LOSE 1 UNIT ENERGY
MEET ENEMIES
LOSE 1 TURN FIGHTING THEM OFF
CARRYING BASKET WEARS OUT-- WEAVE NEW ONE
LOSE 1 UNIT ENERGY
FIND PINON NUTS
ADD 2 FOOD UNITS OR DRAW TRADE CARD
CLOUDBURST
ADD 2 UNITS WATER
TRADE

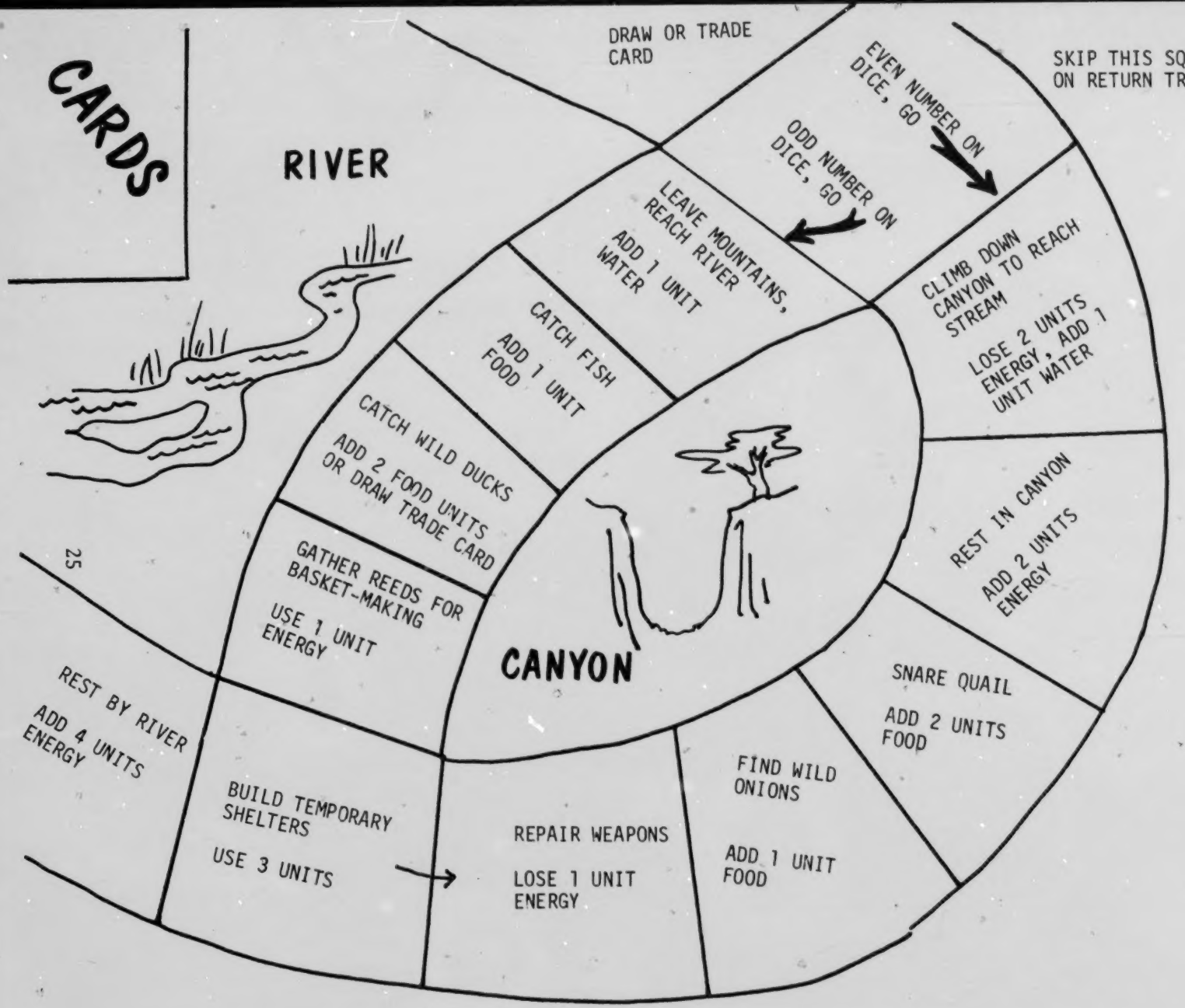
DESERT
GAME COMES TO WATER HOLE
DRAW OR TRADE CARD
FIND MESQUITE BEANS
ADD 1 UNIT FOOD
NO WATER FOUND FOR 2 DAYS
LOSE 2 UNITS WATER
FIND CACTUS PEARS AND BARREL CACTUS
ADD 1 UNIT FOOD
1 UNIT WATER
DROUGHT DRIES UP EVERYTHING
LOSE 1 UNIT FOOD
PUT FOOT IN PRAIRIE DOG HOLE
LOSE 1 TURN WHILE GETTING OUT
CAMP

SURVIVAL GAME

THE VALLEY PEOPLE






CARDS
RIVER
DRAW OR TRADE CARD
EVEN NUMBER ON DICE, GO
ODD NUMBER ON DICE, GO
SKIP THIS SQUARE ON RETURN TRIP
LEAVE MOUNTAINS, REACH RIVER
ADD 1 UNIT WATER
CLIMB DOWN CANYON TO REACH STREAM
LOSE 2 UNITS ENERGY, ADD 1 UNIT WATER
CATCH FISH
ADD 1 UNIT FOOD
CATCH WILD DUCKS
ADD 2 FOOD UNITS OR DRAW TRADE CARD
REST IN CANYON
ADD 2 UNITS ENERGY
GATHER REEDS FOR BASKET-MAKING
USE 1 UNIT ENERGY
CANYON
SNARE QUAIL
ADD 2 UNITS FOOD
REST BY RIVER
ADD 4 UNITS ENERGY
BUILD TEMPORARY SHELTERS
USE 3 UNITS
REPAIR WEAPONS
LOSE 1 UNIT ENERGY
FIND WILD ONIONS
ADD 1 UNIT FOOD
25

WILD GAME CARD 1

Clan arrives just before sunset when the antelope come to drink.

WILD GAME CARD 2

One antelope is lame and cannot run very fast.

WILD GAME CARD 3

One of the hunters throws his spear and hits the heart. The antelope is killed immediately.

ADD: 15 units FOOD

WILD CARD: GAME

Antelope horn and hide can be used for tools, weapons, and clothing.

ADD: 5 units ENERGY

PIÑON NUTS CARD 1

Clan finds large stand of pine trees.

PIÑON NUTS CARD 2

It is autumn, and the pine cones are ripe.

PIÑON NUTS CARD 3

It has been a good year, and the nuts are very large.

ADD: 15 units FOOD (because nuts can be preserved)

WILD CARD: PIÑON NUTS

Clan finds caches where squirrels have hidden more nuts.

ADD: 5 units FOOD

ACORN CARD 1

It is autumn, and the acorns are ripe.

ACORN CARD 2

The branches are low and the trees are easy to climb.

ACORN CARD 3

It has been a good year, and there are many acorns.

ADD: 10 units FOOD
(acorns will have to be leached before they can be eaten)

WILD CARD: ACORNS

Clan finds caches where ground squirrels have hidden acorns.

ADD: 5 units FOOD

27

RABBIT CARD 1

It is feeding time, and the rabbits are all outside their holes.

41

RABBIT CARD 2

The Clan is able to place nets without alarming rabbits.

RABBIT CARD 3

All the rabbits are caught and clubbed.

ADD: 5 units FOOD

WILD CARD: RABBITS

Rabbit skins can be made into warm winter robes.

ADD: 5 units ENERGY

42

DEER CARD 1

Wind is blowing hunters' scent away from deer.

28

DEER CARD 2

Hunters get close enough to wound a fat buck.

DEER CARD 3

Hunters follow blood-trail until buck dies.

ADD: 10 units FOOD

WILD CARD: DEER

Skin and head of deer can be used to make disguise for hunting others.

ADD: 5 units FOOD

DUCK CARD 1

A flock of migrating ducks approaches on their way south.

DUCK CARD 2

Ducks are fooled by decoys and try to land in river.

DUCK CARD 3

Ducks are entangled in the Clan's nets and are caught.

ADD: 10 units FOOD

WILD CARD: DUCK

Men use duck feathers & bones to make fish-hooks.

ADD: 5 units FOOD

INDIVIDUAL TALLY SHEET

		Food Units		Water Units		Energy Units	
		Add	Lose	Add	Lose	Add	Lose
Start:	____	3	____	3	____	3	____
Turn 1:	____	____	____	____	____	____	____
Turn 2:	____	____	____	____	____	____	____
Turn 3:	____	____	____	____	____	____	____
Turn 4:	____	____	____	____	____	____	____
Turn 5:	____	____	____	____	____	____	____
Turn 6:	____	____	____	____	____	____	____
Turn 7:	____	____	____	____	____	____	____
Turn 8:	____	____	____	____	____	____	____
Turn 9:	____	____	____	____	____	____	____
Turn 10:	____	____	____	____	____	____	____
Turn 11:	____	____	____	____	____	____	____
Turn 12:	____	____	____	____	____	____	____
Turn 13:	____	____	____	____	____	____	____
Turn 14:	____	____	____	____	____	____	____
Turn 15:	____	____	____	____	____	____	____
Turn 16:	____	____	____	____	____	____	____
Turn 17:	____	____	____	____	____	____	____
Turn 18:	____	____	____	____	____	____	____
Turn 19:	____	____	____	____	____	____	____
Turn 20:	____	____	____	____	____	____	____
TOTAL		____	____	____	____	____	____

Write # of last turn here: ____ and divide by 2: $2\overline{)\ \ }$ = ____ "days" spent

(if # is uneven, add 1)

INDIVIDUAL SCORE SHEET

A. Totals

1. Write down the number of "days" spent on the trip here: _____

2. Write down the total number of food units gained here: _____

   \- Write down the total number of food units lost here : _____

   Subtract units lost from units gained and put the result here: = _____

3. Write down the total number of water units gained here: _____

   \- Write down the total number of water units lost here: _____

   Subtract units lost from units gained and put the result here: = _____

4. Write down the total number of energy units gained here: _____

   \- Write down the total number of energy units lost here: _____

   Subtract units lost from units gained and put the result here: = _____

* * *

B.

1. Write down total food units left here: _____

   \- Subtract number of days spent (turns) _____

   and put the result here: = _____

2. Write down total water units left here: _____

   \- Subtract number of days spent (turns) _____

   and put the result here: = _____

3. If you don't have as many food units as days, you can use 2 units water to equal 1 unit of food to make it up.

   If you have extra energy units, you can use 2 units energy to equal 1 unit of food.

   Add make up units (water or energy) to present totals and put new total here: _____

   Now subtract the number of days again - _____

   and put result here: = _____

Food surplus

4. If you don't have as many water units as days, you can use 2 units of energy to equal 1 unit of water.

   Add make up units (energy) to present water total or subtract water units given to make up for food and put result here: _____

   Now subtract the number of days again: - _____

   = _____

Water surplus

GROUP SCORESHEET

A.

AVERAGE TOTALS:

1. Write down the highest number of days needed by a member of the group to complete the trip here: ____ ____

2. Add up all the final totals*of food units for group members and put the result here: ____

   Divide by the number of people in the group

   and put result here: ____

3. Add up all the final totals of water units for group members and put the result here: ____

   Divide by the number of people in the group

   and put result here: ____

4. Add up all the final totals of energy units for group members and put the result here: ____

   Divide by the number of people in the group

   and put result here: ____

* be sure you are adding totals and not surpluses
  * * *

B.

GROUP SURPLUSES

1. Write down average of food units left here: ____

   Subtract number of days spent - ____
   and put the result here:
   and put the result here: ____

2. Write down average of water units left here: ____

   Subtract number of days spent - ____

   and put the result here: ____

NEW
SURPLUSES

3. If your group averages of food or water units are smaller than the number of days, you may use 2 units of water to make up for one unit of food, or 2 units of energy to make up for either one unit of food or one unit of water. (Remember, you must have extra units of water or energy to do this).

Add make up units (water or energy) to present food total and put new total here: _____

Now subtract the number of days again - _____

and put result here: = _____

4. Add make up units (energy) to present water total and put new total here: _____

Now subtract the number of days again - _____

and put result here: = _____

Example of Completed Individual Tally Sheet

INDIVIDUAL TALLY SHEET

		Food Units		Water Units		Energy Units	
		Add	Lose	Add	Lose	Add	Lose
Start:	✓	3		3		3	
Turn 1:	✓			3			
Turn 2:	*draw card*						
Turn 3:	✓		1				
Turn 4:	✓			2			
Turn 5:	✓						1
Turn 6:	✓		1				
Turn 7:	✓	2					
Turn 8:	✓			1			2
Turn 9:	✓					2	
Turn 10:	✓	1					
Turn 11:	✓					4	
Turn 12:	*return trip*	2					
Turn 13:	*draw card*						
Turn 14:	✓						4
Turn 15:	✓		1				
Turn 16:	✓			1			
Turn 17:	✓			2			
Turn 18:	✓	1		1			
Turn 19:	✓	1					
Turn 20:	✓	1					
TOTAL		11	3	13		9	7

Write # of last turn here: 20 and divide by 2: $2\overline{)20}^{10}$ = 10 "day" spent

(if # is uneven, add 1)

Example of Completed Individual Score Sheet

INDIVIDUAL SCORE SHEET

A. **Totals**

1. Write down the number of "days" spent on the trip here: = *10*

2. Write down the total number of food units gained here: *11*
   Write down the total number of food units lost here : − *3*
   Subtract units lost from units gained and put the result here: = *8*

3. Write down the total number of water units gained here: *13*
   Write down the total number of water units lost here: − *0*
   Subtract units lost from units gained and put the result here: = *13*

4. Write down the total number of energy units gained here: *9*
   Write down the total number of energy units lost here: − *7*
   Subtract units lost from units gained and put the result here: = *2*

* * *

B.

1. Write down total food units left here: *8*
   Subtract number of days spent − *10*
   and put the result here: = *-2*

2. Write down total water units left here: *13*
   Subtract number of days spent − *10*
   and put the result here: = *3*

3. If you don't have as many food units as days, you can use 2 units water to equal 1 unit of food to make it up. *13 - 10 = 3 extra water units 3 - 2 = 1 food unit, 1 water unit*

Food surplus

If you have extra energy units, you can use 2 units energy to equal 1 unit of food. *2 extra energy units = 1 food unit*

Add make up units (water or energy) to present totals and put new total here: *2 + 8 = 10*

Now subtract the number of days again: *- 10*

and put result here: *0 = 0*

4. If you don't have as many water units as days, you can use 2 units of energy to equal 1 unit of water.

Water surplus

Add make up units (energy) to present water total or subtract water units given to make up for food and put result here: *13 - 2 = 11*

Now subtract the number of days again: *- 10*

= 1

Example of Completed Group Scoresheet

GROUP SCORESHEET

A.

		AVERAGE TOTALS:
1. Write down the highest number of days needed by a member of the group to complete the trip here:	12	12
2. Add up all the final totals of food units for group members and put the result here:	78	
Divide by the number of people in the group and put result here:	13 6 78 6 18	13
3. Add up all the final totals of water units for group members and put the result here:	72	
Divide by the number of people in the group and put result here:	12 6 72 6 12	12
4. Add up all the final totals of energy units for group members and put the result here:	14	
Divide by the number of people in the group and put result here:	2 6 14 12 2	2 1/3

* * *

B.

		GROUP SURPLUSES
1. Write down average of food units left here:	13	
Subtract number of days spent and put the result here: and put the result here:	- 12 -	1
2. Write down average of water units left here:	12	
Subtract number of days spent	- 12	
and put the result here:		0

NEW SURPLUSES

3. If your group averages of food or water units are smaller than the number of days, you may use 2 units of water to make up for one unit of food, or 2 units of energy to make up for either one unit of food or one unit of water. (Remember, you must have extra units of water or energy to do this).

Add make up units (water or energy) to present food total and put new total here: _____

Now subtract the number of days again - _____

and put result here: = _____

4. Add make up units (energy) to present water total and put new total here:

1
+12
13

Now subtract the number of days again - *12*

and put result here: = *1*

Final surpluses for this group are 1 unit food and 1 unit water. This means they barely made it to the river and back again.

Introducing the Game

When the class has finished reading about the Valley People, discuss the following points as a transition between the reading and the game.

1. The Valley People have to have exact and expert knowledge of their environment in order to survive. For instance, they have to know what things they can eat safely, where to find these things, when they will be ripe if they are plants, how to catch or harvest them, and so on. This requires skills un-dreamed of by the modern city-dweller, who simply goes down to the supermarket and buys something to eat.

2. Each member of a clan contributes according to his ability. Not all members do the same things, but everyone must help in order for the group to survive.

3. In order to get food, the individual must use up energy--strength. Do people feel hungrier after a day of heavy exercise, or a day spent lazing around? How does hunger affect people's ability to work? People eat in order to restore their bodies and the energy they have spent. They must get enough food (or food with enough nourishment) to replace the energy that has been used up, or sooner or later they will die.

Finish discussion by telling students that in the Survival Game they will be able to find out how the Valley People deal with these problems.

Playing the Game

Reproduce the directions for the game on pp. 41-44 and give one to each work-group. Then, read the directions aloud. When you have finished, pass out the game materials except for Individual and Group Score Sheets. Trade Cards should be placed in the box in the middle of the gameboard, blank sides up. Discuss the directions and the game materials to be sure students understand what they are to do; answer any questions they have, etc. You may find it advisable to demonstrate the first few moves in a game and show how the tally sheet is used.

Once students understand the game, have them play it. Circulate among the groups as the game progresses, and answer any questions that come up.

Scoring

Scoring the game requires student to add, subtract, and divide. Individual scoring can be assigned as homework if time is short. Or you may want to skip scoring, if time or students' mathematical abilities are not up to it, and simply look at the tally sheets and tell students how they did.

If you have students do their own scoring, have individual students add up their scores on the *Individual Tally Sheets* as each group finishes the game. When all groups have finished, pass out the *Individual Score Sheets*. Use the

blackboard to demonstrate how to use them. (An example of a filled-out Individual Tally Sheet and Score Sheet is given on pages 34-36 of this Teacher's Guide.) It may require several demonstrations before everybody gets the idea. Encourage students to help each other. You can also demonstrate on the board or make a transparency of a completed sheet.

When each group member has worked out his own score, pass out one *Group Score Sheet* to each workgroup and have each group choose the best mathematician to work out the group score (or you may have each student try to work it out and then compare answers with the others.) If necessary, go over the group sheets with the students. The group score is computed in much the same way as the individual score, except that the number of "days" assumed to have been spent by the "clan" in their trip is the same as half the largest number of turns taken by any of the members (i.e., a group can only move as fast as its slowest member). Food, Water, and Energy totals should be divided by the number of group members to come up with the group average. Extra units of one kind can then be used to make up for missing units of another kind, as in the individual score. An example of a completed group score sheet appears on pages 37-38 of this Teacher's Guide.

Interpreting Scores

When each group has worked out its score, hand out or read aloud p. 45 --the Key which explains what the scores mean. After students have read the Key and determined whether their group "survived" or not, talk about the relationship between nourishment and energy. The following points might be made:

- The purpose of the clan in making the trip was to collect extra food which could be stored for the winter. For the trip to be a real success, the group should have come back with a lot of extra food units.

- The clan is able to store some water in its waterskins and bottles (tightly woven baskets daubed with pitch inside), but not a great deal. Besides, they have a water supply at their home camp. Extra water is mainly useful to them for taking a bath if they want to.

- If the group came out with just about enough food and water, they have all survived the trip, but they have not succeeded in storing up any extra food. If they are a little under the needed total, they have come back hungry, but alive. Perhaps they can make another trip soon and have better luck.

- If the food and water totals were much smaller than the number of days, the clan will have lost some of its members. Up to a certain point, the stronger members can carry the weaker, give up their food for them, etc. (this is represented in the game by averaging out the individual totals), but eventually the weak will die. In general it is the very young and the very old who die first. A group whose children keep dying will eventually disappear because there will be no one to replace the adults as they grow old.

- Sometimes the energy spent looking for food is greater than the amount to be gained by eating it. In some cultures the men always eat first, because if they do not have enough strength to go hunting, nobody will get any more food.

EXERCISE 3. THE SURVIVAL GAME

One day in early fall, the Chief of the Deer Clan decided that it was time for his group to make a trip to gather food for the winter.

In this game, your group will pretend to be members of the Deer Clan, making your yearly trip to the river to gather food. The object of the game is to get from the permanent camp in the hills to the river and back again without losing any members of the group.

Players move separately, but at the end of the game all scores will be added together to decide whether the clan "made it" (survived) or not. In order for the clan to survive, everyone must get at least enough food and water to make up for the energy he uses on the trip. Each player will begin with a small amount of food, water, and energy (3 units each).

Each turn equals one half day on the trip. In order to survive, the total for each player at the end will have to include 1 unit of food and 1 unit of water for each "day."

Your teacher will give you a gameboard and markers for this game. To take a turn, throw a die (one of a pair of dice) and move your marker as many spaces ahead as it shows. There are more directions in the spaces on the gameboard. Some will show that you found or used food or water. They will tell you to add or subtract a certain amount of

units from your supply.

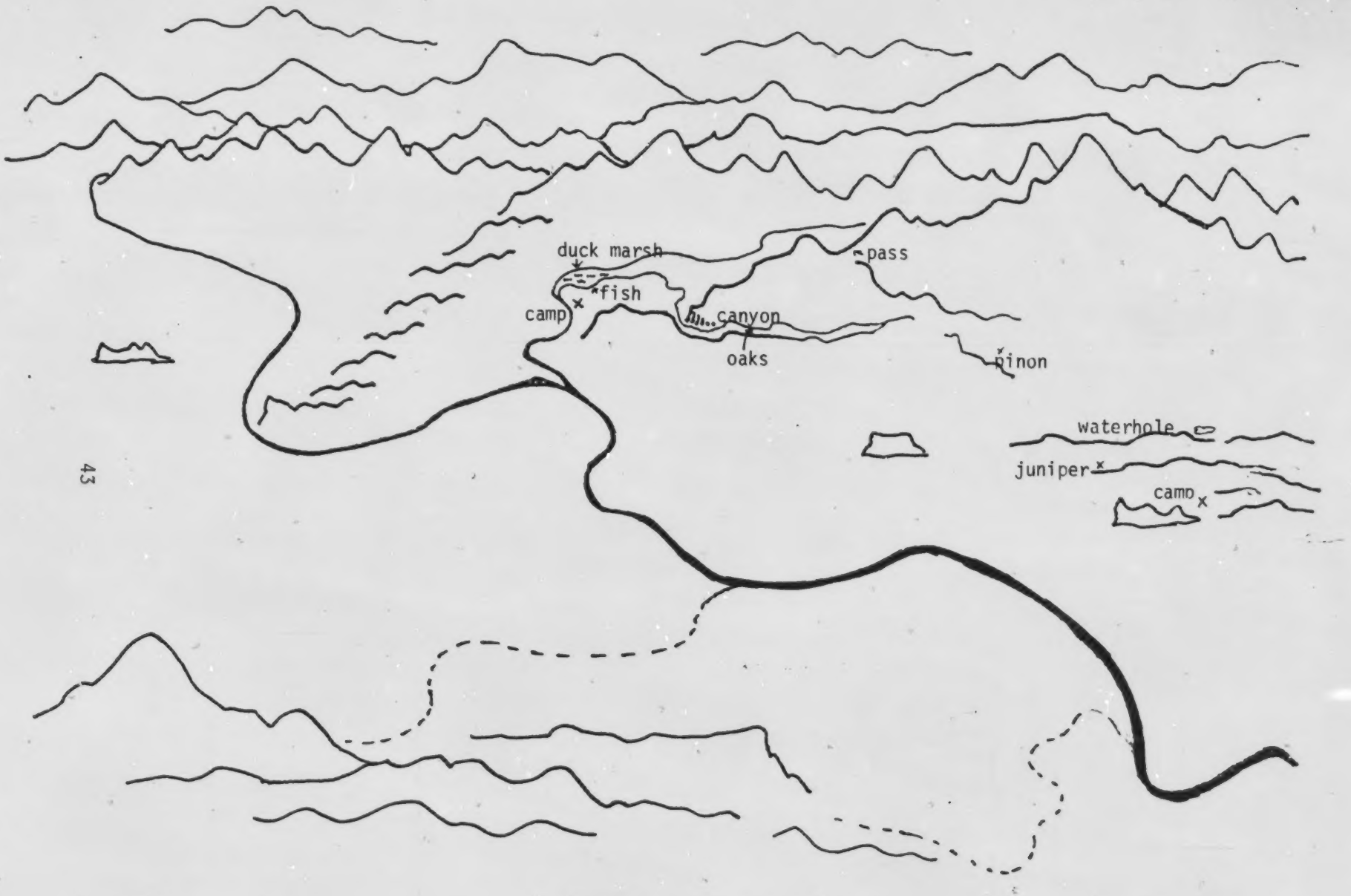
Some of the spaces allow you to draw a "Trade Card." These cards are placed face down in the center of the gameboard. You do not *have* to draw a trade card, but you *may*. Each card you draw, or trade with someone else who has a card, costs you one unit of food--but when you have all the cards in the set, you might win as much as twenty units. When you land on a trade card space, you may only draw one card. But you may trade as many times as you can find someone willing to trade. Each card shows one of three conditions that must exist for you to get the food. You must get *all three* cards in order to gain the extra food units.

Sets of cards can be turned in for units only at the space to which they apply. For example, deer cards can only be used at the deer square. Acorn cards can be used only at the acorn square. But you can also save the cards and claim your units on the *return trip*.

There are a few "wild" cards in the deck. They allow you to add extra points after you have gotten the other three cards in that set.

Every time you move, check off the move on your tally sheet. Put down whether you added or lost food, water, or energy units, and how many. At the end of the game (after everybody has made the trip both ways) you will add up your units. Then you will combine your scores with those of the other players in your group to find out how well your "clan" did on its trip.

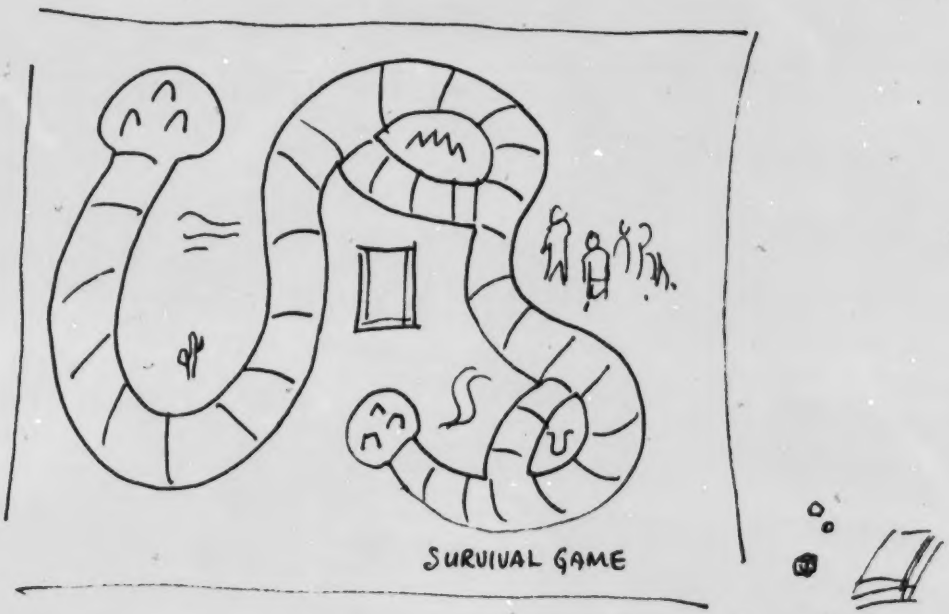
The map on page 43 shows the route the clan will take on its trip.



43

THE DEER CLAN'S TERRITORY

This is what the gameboard looks like.



Your teacher will give game materials now and scoresheets later on.

WHAT DOES YOUR SCORE MEAN?

- If the final total of food units for your group was *more* than the number of "days" spent on the trip, then your group was very successful . It has brought back plenty of food to store.

- If the final total of water units for your group was *more* than the number of "days" spent on the trip, your group is probably clean as well as not being thirsty.

- If the total of food and water units was the *same* as or very close to the number of days spent, your whole group survived. You didn't bring much back, though. If your total was a *little* less, you are probably somewhat hungry or thirsty.

- If the final total of food or water units was *a great deal less* than the number of days spent. . .some of your people probably didn't make it. . .

How did your group do?

Exercise 4. Review Questions

When students have finished playing, scoring, and discussing the Survival Game, reproduce and hand out or write on the board the review questions (p. 47). In this exercise, students will be asked to review what they learned in the reading and in the game by answering questions about the roles and activities of various groups within a Valley People clan and about how the clan went about meeting its basic human needs. Go over the exercise with students to make sure they understand what they are to do; answer any questions they may have. If you wish, instruct the students to discuss the questions with other members of their workgroups and come up with group answers. If you want students to answer the questions in writing, make sure they have paper for this exercise.

When students have finished the exercise, you may want to give them the sample answers on p. 48.

When students have finished and corrected this review exercise, you may wish to go over the answers in class. Make sure students have understood the arrangement of the Valley People's society and other concepts covered in this Activity.

Additional Activities

Possibilities for expanding this Activity include visiting a museum which has an exhibit on some group similar to the Valley People, or artifacts typical of such a culture; taking the class on a hike and seeing how many useful plants they can find; or making a diorama or mural of a Valley People camp and the surrounding country.

If time and resources allow, it would be of great value to have students begin a research project about their own area, following each presentation of a stage in the history of the Basketmakers with an investigation of the comparable stage in the history of their own tribes. Research could include preparation of maps and drawings, stories, etc., and could take the form of individual reports, group reports, or a class project. In addition to providing students with more information, such a project would greatly increase the relevance of this unit to students from outside the southwestern area.

Additional Resources

Additional resources for this Activity are listed and described on page 166 of this Teacher's Guide.

EXERCISE 4. REVIEW QUESTIONS

Here are some questions about the Valley People and the way they live. If you have any trouble answering them, take another look at the reading you were given and at the gameboard.

A. 1. Who gathered most of the vegetable food the clan ate?

2. Who did the hunting?

3. Who built the shelters?

4. Who gathered firewood?

5. Who probably gathered the herbs to heal sick people?

6. If an enemy had attacked the clan, who defended them?

7. Who made the decision about when and where the clan should go?

8. Who wove rabbitskins into robes?

B. How did the Valley People meet their needs for:

1. Food (what did they eat?)
2. Shelter
3. Clothing
4. Heat
5. Transportation (how did they get around?)
6. Tools
7. Health care
8. Defense
9. Government (how were decisions made for the clan?)

Sample Answers

EXERCISE 4: REVIEW QUESTIONS

Your answers should be something like this...

A. 1. Who gathered most of the vegetable food the clan ate?

the women, helped by the children

2. Who did the hunting?

the men

3. Who built the shelters?

everyone helped

4. Who gathered firewood?

the children

5. Who probably gathered the herbs to heal sick people?

the old medicine man or woman

6. If an enemy band attacked the clan, who defended them?

the men

7. Who made the decision about when and where the clan should go?

the chief

8. Who wove rabbitskins into robes?

the women

B How did the Valley People meet their needs for:

1. Food

   by hunting deer, antelope, rabbits, quail and duck, etc., and by gathering acorns, piñon nuts, mesquite beans, juniper berries, wild onions, and so on.

2. Shelter

   by building round or dome shaped brush-covered houses or shelters

3. Clothing

   by tanning deerskin, and by weaving strips of rabbitskin into robes

4. Heat

   by building fires

5. Transportation

   by walking

6. Tools

   by using stone, wood, horn etc. to make tools and weapons

7. Health care

   by the medicine man or woman gathering herbs and performing healing ceremonies

8. Defense

   by the men using their weapons to defend their families

9. Government

   by the chief finding out what the people wanted and making the decisions

Activity 2. The Village

GOAL:	To introduce the idea that changes in environment cause changes in culture and life-style, and to present students with basic facts about a simple agricultural culture
OBJECTIVE:	Students will practice predicting what cultural changes will occur as a result of given environmental changes, and will study the nature of a simple agricultural culture and its similarities to and differences from a hunter-gatherer culture.

WHAT STUDENTS WILL BE ASKED TO DO

- Read a series of paragraphs describing environmental changes and predict effects which these changes will have
- Read a description of a simple agricultural culture
- Compare the agricultural stage of the Basketmakers' development with the hunter-gatherer stage and identify similarities and differences in roles, tasks, ways of meeting basic needs, etc.

MATERIALS NEEDED

- *For Exercises 1 and 3*: pencils and paper
- Duplicated pages as indicated in instructions for exercises

PROCEDURE

Introduce the idea of adaptation to environmental change by bringing up ways in which people do this today. You may wish to mention some or all of the following:

1. In the summertime you wear lightweight clothes, but in the winter, you get out your warmest coat.

2. You can pick or buy fresh peaches in the late summer, but in the winter you will have to find something else to eat.
3. If you live where it snows a lot, your house may have a steep roof so the snow will slide off. But if you live where it is hot, you will probably have a flat-roofed house.

If you can, add other examples of seasonal or other environmental adaptations characteristic of the area in which the school is located or in which the students have their homes. Once the students begin to get the idea, you might have them suggest some adaptations, too.

Explain to students that these examples all show how people react to changes in their environment. Most of these changes do not last long. However, if any of them became permanent (if it became cold all the time, for instance), then the people might find themselves changing their actions permanently too. Tell students that in this Activity they will have a chance to see how the Valley People adapt to changes in their environment.

Exercise 1. What If?

Reproduce and hand out copies of pp. 52-54. Explain to students that now that they have had a book at the everyday life of the Valley People they should think about what that life might be like if certain things around them changed. In exercise 1, students will read a series of paragraphs describing possible changes in the Valley People's environment. Each paragraph is followed by several questions which require students to predict what effects these changes might have on the Valley People, on other living things in the environment, etc. Students should answer the set of questions following each paragraph before they go on to the next paragraph.

Go over the exercise briefly with students to make sure they know what they are to do. See that they have paper for writing the answers to the exercise. If students have great difficulty with reading, you might read the paragraphs to them one at a time and then allow time for written or oral answers to the questions.

When students have finished the exercise, you may collect the papers and go over them. (Sample answers for this exercise appear on page 55 of this Teacher's Guide.) Or, if you prefer, you may have workgroup members compare answers and come up with combined lists of possibilities which can then be compared with the lists of other groups. At some point you may wish to have a general class discussion about the answers to the questions.

Activity 2. The Village

EXERCISE 1. WHAT IF?

You've had a short look at the everyday life of the Valley People. Now think about what their life might be like if certain things change.

The following paragraphs describe some changes that might take place in the environment of the Valley People. After reading each paragraph, answer the questions which follow it. Write your answers on a separate piece of paper.

1. The valley in which the people live is almost like a desert. Very little rain falls there during the year. Because of this, there are not many plants. There are not enough to hold down the dirt. However, the plants that do grow in the valley are strong. They need very little water to live. The animals are also good at living in this environment. Many small animals, like rabbits and gophers, live in burrows underground. There they are safe from the summer's heat. Because there is so little water, the animals live near waterholes wherever they find them. Every 50 to 75 years or so, huge rains come to the valley and wash away the dirt. The water carves deep gullies overnight. Old landmarks disappear. Even mesas and sandstone cliffs may change or disappear as the heavy rains and rushing waters wear them down.

Questions:

A. What do you think the heavy rains would do to:
   1. the way the land looks?
   2. the animals in the valley?
   3. the plants in the valley?

B. Can you think of a problem the Valley People might have after the rains?

2. There are many kinds of birds in the valley. Some of them eat seeds. Some of them eat insects. One year, one of the birds comes back from the south with a disease which it gives to other birds.

A. If many of the birds die, what will happen to the seeds?

B. What will happen to the insects?

3. As the Valley People are moving camp, they meet another group of Indians coming down from the north. These other people have spears with very hard points made from a stone found in the north. They trade some of their spear points for the Valley People's beautiful baskets.

The Valley People find that the new points are sharper and last longer than the ones they had. They can use them to kill bigger animals, like elk and mountain sheep. Larger animals mean they have more meat. The hunters do not have to go hunting so often now.

How might having these spear points change:

A. the number of people who can live together in a group?

B. the way the hunters spend their time?

SAMPLE ANSWERS

Exercise 1. What If?

1. A. What do you think the heavy rains would do to:

(1) the way the land looks?

old hills might be washed away, there would be new canyons too

(2) the animals in the valley?

many animals would be drowned, but there might be fish and frogs for a little while

(3) the plants in the valley?

some would be washed away, but seeds which had been waiting in the ground would suddenly grow, and there would be many plants and flowers

B. Can you think of a problem the Valley People might have after the rains?

If the way the land looks were changed, they might have trouble finding their way around.

If they had built their camp on low ground, it might be washed away.

Unless they knew how to use the new plants, fish, etc. for food, they might go hungry for a while.

2. A. If many of the birds die, what will happen to the seeds?

There will be more seeds than usual, and the people can gather them.

B. What will happen to the insects?

There will be more insects, too, and they might eat up other plants the People use for food.

3. A. How might having these spear points change the number of people - who can live together in a group?

If they have more food, more people can live in one place.

B. The way the hunters spend their time?

If they don't spend so much time hunting, they can spend it making things (art), developing religious ceremonies, etc. Other changes in the lives of the People might be different kinds of clothing and shelter from the larger animal skins, establishment of trade with the people from the north, etc.

Exercise 2. The Villagers

When students have finished and discussed Exercise 1, explain that in that exercise they were asked to think about what might happen if the Valley People met people with better spear points. But what would happen if they met people whose way of life was completely different? In Exercise 2, they will be finding out what happened to the Valley People when they met people who knew how to grow corn.

Reproduce and hand out copies of pp. 57-59 , "The Villagers." You may choose to record this reading on a cassette tape, or read it to the class instead, but they should have copies available for reference in doing the review questions. Following the reading in this book is a picture of the village that the Valley People eventually build. It can also be reproduced and handed out, or shown on an overhead projector. Ask students to look at this picture carefully, and note the ways in which the people and their way of life have changed since their wandering days. In reality, the process of cultural diffusion described in the story would have taken place over a period of many years. It is speeded up here for the sake of brevity and dramatic effect.

Discuss the reading and the picture with students before going on to the review exercise. Cover the following points:

- Growing crops require people to stay in one place for awhile.
- Corn is so nourishing, and keeps so well, that enough can be kept around for a fairly large group to live together.
- Even if the Valley People had wanted to live in permanent villages before, they could not have done so until they had a new food resource--corn.
- Changes in lifestyle may be forced by changes in environment, but they become permanent only when new resources or techniques become available. To help students understand this, ask, "What would have happened after the drought was over if the Valley People had not met the Villagers? What would have happened if they had discovered the village and corn, but had not learned how to grow it themselves?"
- Have students compare the new map with the one from the first activity. What do the two maps tell us about the number of people now living in the valley?

The Villagers

The Valley People have been living very happily for many years. But then something terrible happens. One year the rains don't come. One by one, the water holes dry up. The animals move away. The food plants die. Soon the clan realizes that it must follow the animals. Like them, it must leave the valley to search for water.

The people of the clan move north. They go toward the place where the river comes out of the mountains. In the mountains, things are a little better. But people already live there, and these people are good fighters. So the Valley People move on. Finally on the other side of the mountains, the clan finds another people. These people have ways which are different from any the Valley People have ever met.

These new people live near a river. They have small houses made out of adobe (mud) bricks. The houses are built close together in a little village. Outside the village are fields green with corn plants, beans, and squash.

The villagers are afraid of the Valley People. (They have been attacked by other wandering tribes in the past.) But the wanderers are much too tired to fight. Instead, they agree to help defend the village from other tribes. In return for this, the villagers will give them food.

The Valley People stay with the villagers for many years. Their children grow up and marry villagers. They teach the village people how to weave baskets. The villagers teach them how to build mud houses and how to grow corn.

The dry years pass. After a while there are a great many people in the village. There is not enough good land to grow food for them all.

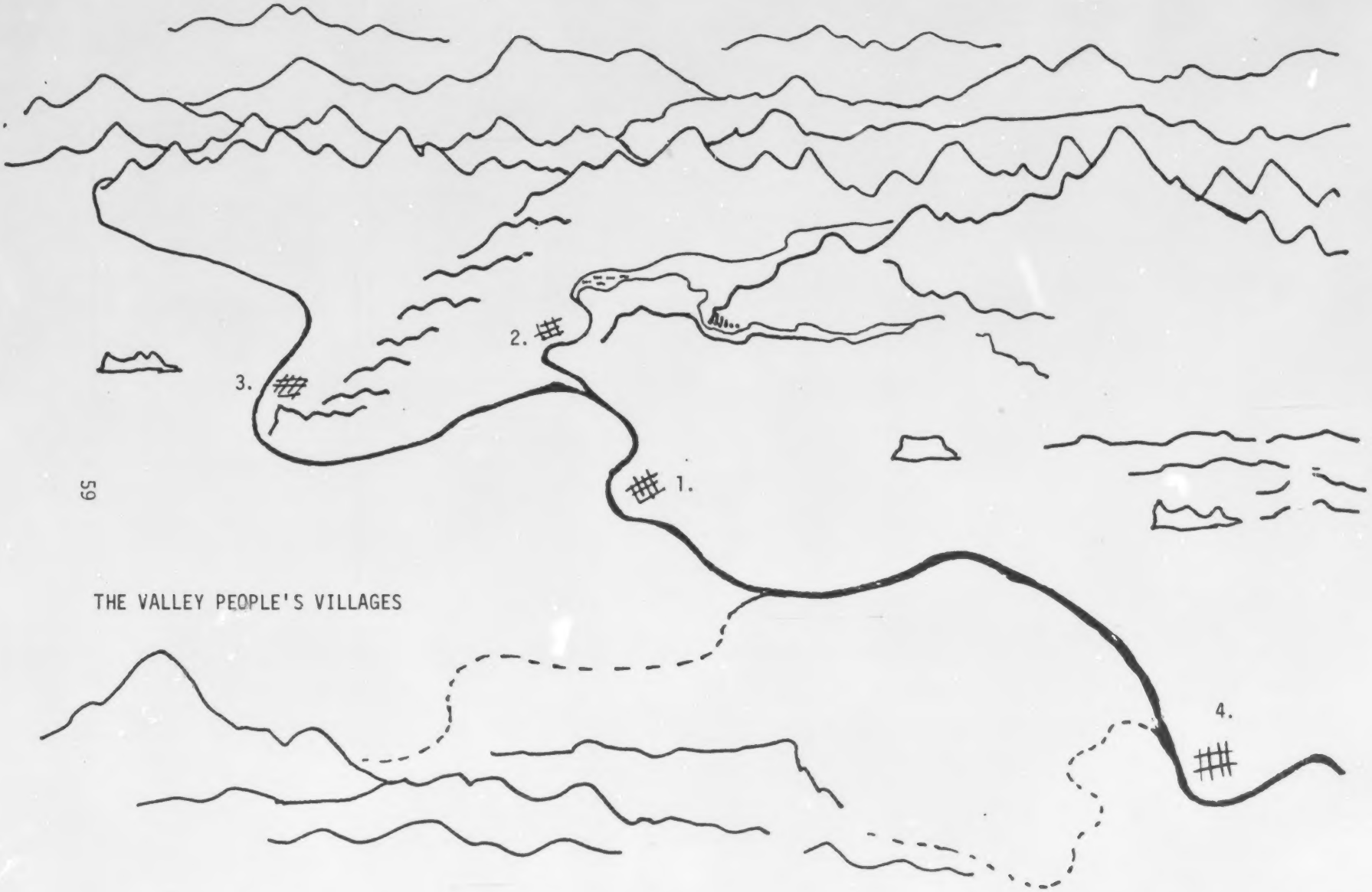
The Valley People have never forgotten their own home, and now they decide to return. So the people of the clan, with their children born in the village and their village wives and husbands move south. They go through the mountains and down the river into their own valley once more.

In a bend of the river they find a spot that is like the land around the village they left. There they stop. They call the place First Village. They expect that, as the tribe grows larger and as other clans learn new ways, other villages will be started farther down the river.

In this new village the men help to set the fields ready for planting. But the women grow, pick, and store the corn, squash, and other crops. Men do the heavy work in building the houses. Women finish them. The men go on hunting trips as before, and they bring the meat back to the village. But now they wear tunics and kilts made of cotton. (The women grow the cotton and weave it into cloth.)

Now the people have more time for art and religion. Since they depend on their crops, they have to hold ceremonies to make sure that the crops will grow. Now the men spend a lot of time in religious activity. There are many festivals and dances.

On the next page is a map which shows where villages have been built. Your teacher will show you a picture of life in First Village. Look at the picture carefully. How has the life of the Valley People changed since the days before they learned about corn?



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THE VALLEY PEOPLE'S VILLAGES

Exercise 3. Review

When students have finished reading and discussing the story about the Villagers and the picture, tell them that they will now do a review exercise in which they will be asked how the Valley People's ways of meeting their basic needs have or have not changed since they started living in villages. They will also be asked how both the roles and the jobs of individual groups within the Valley People's society have or have not changed.

Reproduce and hand out copies of Exercise 3 on p. 62 . Before students go on to Part B of the Exercise, you should discuss the difference between jobs and roles. This distinction is sometimes hard to make.

The question of roles is particularly important today. Questions about the nature of and necessity for roles are being raised by many (for instance, the Feminist movement). Also, roles are generally culturally determined, and students may be experiencing some conflict between traditional Indian and current American definitions of appropriate male, female, or adolescent roles (not to mention White ideas about what roles are appropriate for Indians).

Basically, "role," may be defined as the whole complex of tasks or behaviors culturally assigned to a person. Roles may be assigned on the basis of sex, age, class, race, ability, etc. A culture usually has some governing principle--some basic concept or image of what a man, woman, etc. *is* -- which determines what specific jobs or forms of behavior are considered appropriate.

"Tasks", as used in B. 2, means specific activities , such as sweeping the floor or preparing food. Some activities may always be part of a certain role, while others may be done by whoever is handy. Be sure students understand that they are to indicate which tasks done by men, etc. are different than the ones men did in their nomad days, *not* which tasks done by men are not done by women or children.

In B. 3, students should be encouraged to look for the basic role concept that explains why a new task is assigned to one sex or the other. Once you are sure students understand what they are to do in this exercise, see that they have paper to write on and tell them to go ahead.

When students have finished the exercise, you may read or give them copies of the sample answers on p. 64 so that they can check their work. Go over the answers in class until you are sure that students understand the main differences between a hunter-gatherer and an agricultural culture, and other concepts introduced in this activity.

EXERCISE 3. REVIEW

A. Meeting Needs

What has changed in the way the Valley People live now that they live in a village? What has stayed the same? Indicate whether each of the things listed below has changed or not, and how.

Thing or Activity	Same	Different? (how)
(Example) Ways of Getting Around	✓	
1. Kinds of vegetable food eaten		
2. Kinds of meat eaten		
3. Ways of getting vegetable food		
4. Ways of getting meat		
5. Clothes		
6. Ways of getting materials for clothes		
7. Materials used to build houses		
8. Ways of heating and cooking		
9. Ways of leading the tribe		
10. Religion		

B. Roles and Jobs

1. Are the roles played (the kinds of work done) by men, women, and children mostly the same in the villages as they were in the band, or different?

	Same	Different
Men		
Women		
Children		

2. Are the jobs done by men, women, and children the same in the village as they were in the wandering band, or are they different?

	Same	Different? (how)
Men		
Women		
Children		

3. a. Are there any cases where a certain person or group of people still have the same role, but different jobs?

   b. What is alike about the different jobs that make them belong to the same role?

Sample Answers

EXERCISE 3. REVIEW

A. Meeting Needs

What has changed in the way the Valley People live now that they live in a village? What has stayed the same? Indicate whether each of the things listed below has changed or not, and how.

Thing or Activity	Same	Different? (how)
(Example) Ways of Getting Around	✓	
1. Kinds of vegetable food eaten		*now they eat corn, squash, and beans*
2. Kinds of meat eaten	✓	
3. Ways of getting vegetable food		*now they grow food instead of gathering it*
4. Ways of getting meat	✓	
5. Clothes		*now they wear cotton tunics and kilts*
6. Ways of getting materials for clothes		*now they grow cotton to weave into cloth instead of hunting animals and using skins*
7. Materials used to build houses		*now they build with stones and mud on a framework of branches, instead of using brush*
8. Ways of heating and cooking	✓	
9. Ways of leading the tribe	✓	
10. Religion		*more time spent on more complicated ceremonies*

B. Roles and Jobs

1. Are the roles played (the kinds of work done) by men, women, and children mostly the same in the villages as they were in the band, or different?

	Same	Different
Men	*hunting, defense, heavy work*	
Women	*still in charge of vegetable food*	
Children	*gather firewood, help*	

2. Are the jobs done by men, women, and children the same in the village as they were in the wandering band, or are they different?

	Same	Different? (how)
Men	*mostly the same*	*do more housebuilding, spend more time on religion*
Women		*grow crops, instead of gather, weave cloth, instead of tanning skins*
Children	*same*	

3. a. Are there any cases where a certain person or group of people still have the same role, but different jobs? *yes*

b. What is alike about the different jobs that make them belong to the same role?

the different jobs are still involved with meeting the same need

Additional Activities

Possibilities for expanding this Activity include visiting a museum which has an exhibit illustrating village life (for instance, the Heard Museum in Phoenix has a fine series of displays showing how the peoples of the Southwest adapted to changing environmental conditions); and continuing with a diorama or mural if this was begun in Activity 1. It might also be interesting for students to do research on agricultural methods of their own tribes, if appropriate. Use these activities to provide more examples of cultural development and the relationship of resources to way of life.

Additional Resources

Additional resources for this Activity are listed and described on page 166 of this Teacher's Guide.

Activity 3. The Town

GOAL: To introduce the idea that introduction of new techniques and resources can cause changes in culture and lifestyle, and to outline the socio-economic structure of a small town in a rural area

OBJECTIVE: Students will study the history of a tribal culture after the coming of Europeans and a description of life in the culture in 1940, and will identify similarities and differences in lifestyle as compared to the earlier agricultural culture.

WHAT STUDENTS WILL BE ASKED TO DO:

- Read a short passage which summarizes the history of the valley after the coming of the Europeans.
- Study a map of the valley, in 1940, and answer simple questions about the story and map.
- Read a story about a day in the life of a boy and girl of the Valley People in 1940.
- Compare the modern rural culture with the agricultural culture described in the last activity.

MATERIALS NEEDED

- *For Exercise 1 and 3:* pencils and paper
- Duplicated pages as indicated in Exercise instructions

PROCEDURE*

Before beginning this Activity, try to find out how many of your students live or have lived in a rural area. Even if you are located in the city, you will probably find that many of your students were born on reservations or in the country or have made visits to relatives there. Using this information, begin this Activity by asking a few general questions about rural areas and what they are like. Where do you get food, medical care, supplies? How do you get around, etc.? If students have had Unit #4 in this series, you may build upon some of the concepts introduced there.

After you have got students thinking along these lines, either through a discussion or through having them write a brief description of a rural small town, explain that in this Activity they will meet another chapter in the history of the imaginary Indian Tribe in their valley. In this Activity they will learn what happened to the area when white settlers moved in, and how the life of the Indians changed.

Exercise 1. A History of "Golden Valley"

Reproduce and hand out copies of pp. 69-71 in this book. This includes the reading "Golden Valley," which tells the history of the Valley People's home from the first coming of white settlers to about 1940, and a map showing what it looks like at that date. You may also record this passage on a cassette tape, or read it to the class.

When students have finished reading and studying the map, discuss the reading using the following questions. (These questions may also be given to students to answer in writing.) Have students refer back to the reading and the map if necessary to find answers.

1. Why were the white settlers able to build permanent homes in places the Indians could not? Name two new things the Europeans had that helped them.

   They could dig wells for water where it was not available before, they had a source of food and money (cattle) that was new, and they had horses and later cars so they could travel farther to get supplies.

2. Why did the farmers settle near the river? What did they need that the Indians had also needed in order to farm?

   They settled near the river for the same reason the Indians had--so that they could plant crops on the rich bottom land and use river water to irrigate them.

3. If there were a drought in the valley now, would everyone have to move away to get food? Why or why not?

   Food and water could be brought in to the valley by railroad or car from other places, so people would not have to move away.

Activity 3. The Town

EXERCISE 1. A HISTORY OF "GOLDEN VALLEY"

When people meet new people who have other ways of living, one or both sets of people often change some of the things they do. The Indians had been learning new ways from each other and building their own cultures for many hundreds of years. But in the eighteenth and nineteenth centuries, the Indians of North American for the first time met people whose ancestors had come from Europe. The people from Europe looked different. They had different religions. Their houses, tools, food, clothes, weapons, and ways of getting from place to place were all very different from anything the Indians had ever known.

Some of the things the white men brought, like horses and guns, the Indians took over immediately. In fact, the Indians soon could shoot better and ride better than most white men. At the same time, the white people also learned many skills from the Indians.

Very soon, the Europeans spread all over America. There were many wars as the Indians tried to defend themselves and their land. But they did not succeed. By the end of the nineteenth century, the white people were living everywhere. They had built homes and towns. The Indians moved to or were shut up on small parts of the lands they used to have. Now they had to learn to live in this new world. They had to learn those European ways that were useful, without losing their own culture.

On the next few pages, you will learn what happened to the Valley People and their home when they met people from Europe.

GOLDEN VALLEY

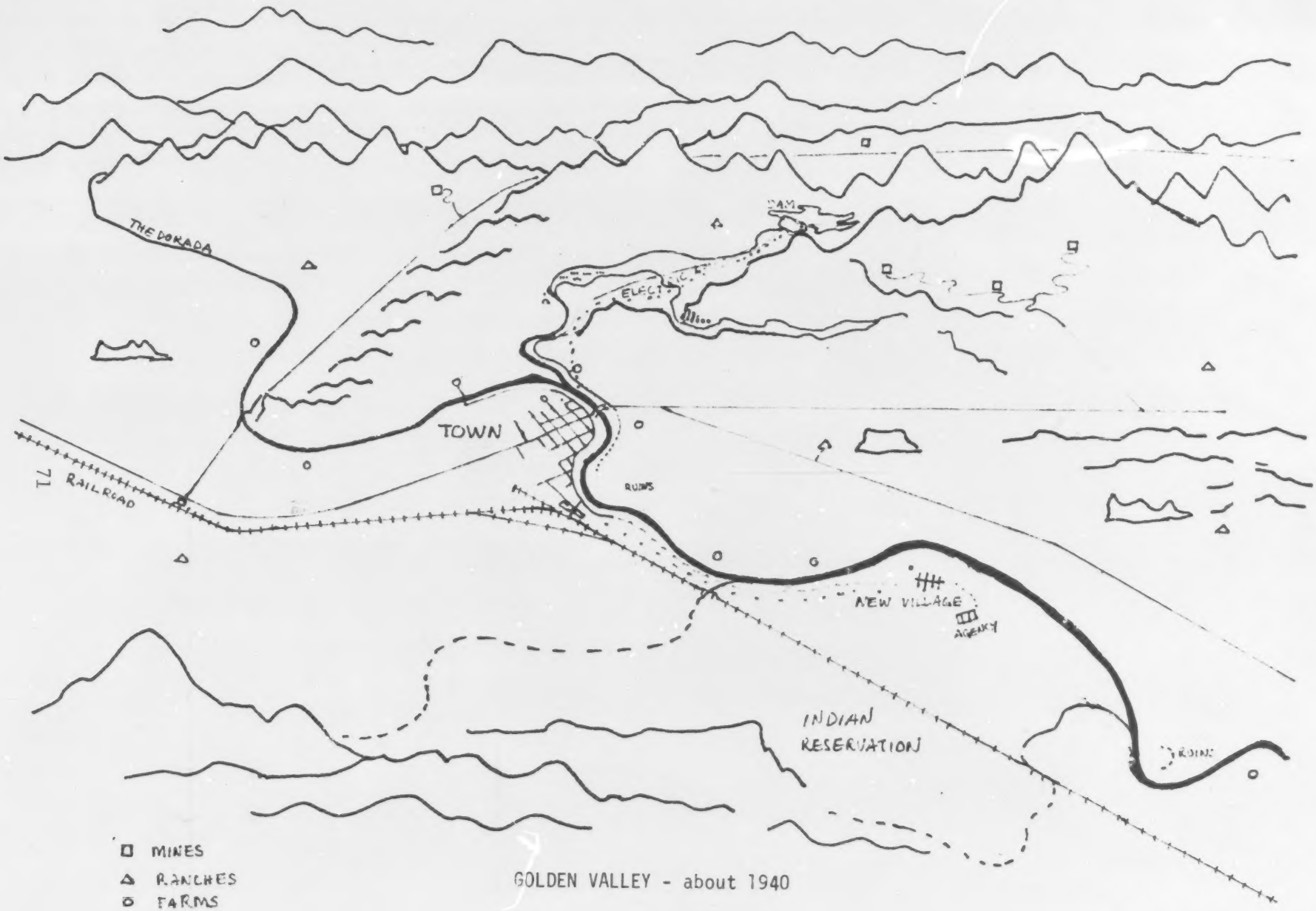
After the Valley People learned to grow corn, they built several villages along the river. There they lived happily for many years.

In the 17th century some Spanish explorers came through the valley. They named the river the Dorada (golden) because they hoped to find gold there. But they did not find any, so they did not stay long. The priests they sent did not stay long either. The valley was too far from the main Spanish colonies for them to set up a town or church there.

In the 19th century some white "Mountain Men" came through the valley on their way to the mountains. They were looking for beaver. A little later, some groups of people tried that way to get to the Gold Rush in California. Two men from the group stayed in the valley. They set up a little trading post where the two forks of the Dorado joined. When the railroad came through, a station was built nearby.

One by one, white families began to move into the valley. They dug wells. They started cattle ranches on the grass-covered plains near the mountains. They built farms in the rich land near the river. After a while the trading post and the railway station became the center of a town. People called the town "Golden Valley." Then copper and silver were found in the mountains, and the miners came.

All these people killed off the game animals, or they built on the land on which the Valley People had always hunted. Farmers wanted the Indians' rich farmland. What they wanted they often took. When the Indians tried to fight back, the white people called in the soldiers. Finally a treaty was made. The Valley People were "given" a reservation on the other side of the river. They built a new village there.



GOLDEN VALLEY - about 1940

After students have read the passage, you may want to discuss it with them. Stress that the People's valley is an imaginary place, and its history has been rather more peaceful than that of most parts of America. If time permits, encourage students to compare the history of their tribes during this period with the history of the Valley People.

For instance, in this story no missions were established near the tribe, but many missions were built in other parts of the southwest, and did many things for the people around them.

The material in this Activity in particular may be somewhat sensitive. The process of changing from a totally traditionally lifestyle to somewhat Europeanized one was for most tribes both abrupt and painful. The white man's contribution to Indian life unfortunately did not stop with new techniques and resources. It would be dishonest to pretend that the Winning of the West was in general anything but a disaster for the Indians. However, since it has happened, the Indians might as well use the new ways to win something back if they can.

The resource list for this Activity contains information on several books which may provide useful background on these points.

Exercise 2. Jimmy Bowman Comes Home

This exercise consists of a story in which students will meet Jimmy Bowman and his sister Delia, a boy and girl of the Valley People living in 1940, and follow them through one day in their lives. The story is on pp. of this book, and can be reproduced and given to students to read, or, since it is rather long, you can read it to them.

Ask students to listen or read the story, advise them to keep in mind what they learned about traditional ways of the Valley People. As they come to each incident in the story, they should consider what in it is traditional and what is new. They should also try to figure out why the things that are different have changed. (If you are reading the story aloud, you may want to stop after each incident and discuss it.)

EXERCISE 2. JIMMY BOWMAN COMES HOME

In the air was a smell of something good cooking. Jimmy opened his eyes. Now he knew he was home for sure! He was back from boarding school, and he had the whole summer ahead of him.

His mother saw him move and smiled. "Wake up, sleepy, or all the food will be gone," she said. His grandfather and sister Delia were already eating. The baby watched them with bright eyes from her cradleboard.

Quickly Jimmy pulled on a pair of jeans and a shirt. He put on his old boots and combed his hair. Then he rolled up his blankets and put them with the other bedding against the wall.

The family was sitting near the wood stove that was built into a corner of the room. When Jimmy sat down, he saw that this really was a welcome-home meal. His mother had mixed dried peaches from their own trees into the cornmeal mush.

"I hear Bill Mackay is taking his wagon into town today," said Grandfather.

"Oh? I have finished some more baskets... Mr. Schuller at the trading post said he could sell as many as I can make," said Jimmy's mother.

"Did you say this was the last of the coffee?" said Grandfather, lifting his cup.

Mother nodded, "We need sugar too."

The horses' hooves clopped loudly as they reached the paved road. Jimmy and Delia waved as they passed the railroad station, even though they knew their father was probably up the line somewhere, checking the track.

Soon they started down the main street of town. Bill was going to the Agricultural Extension Office. He wanted to see if he could get work helping out on one of the ranches in the valley. He stopped in front of the trading post, and Jimmy and Delia jumped down.

Mr. Schuller was talking to some tourists when Jimmy and Delia came in. They waited, holding the baskets. Over the cash register was a sign stating that the store was built where the first trading post in Golden Valley had been. The tourist lady saw Jimmy and Delia and whispered to Mr. Schuller. Jimmy stared at her.

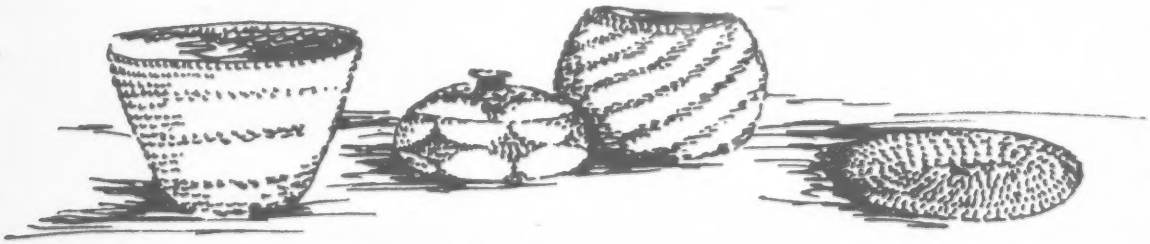
Mr. Schuller winked at Jimmy and began to tell the lady about the baskets. He explained that Jimmy's mother was one of the most famous basketmakers in the tribe. Delia handed him a basket. The lady was saying how cute the children were.

"Five dollars," said the lady's husband.

"Oh, come now," said Mr. Schuller. "The basket's handmade."

"The price is fifteen dollars...ma'am," said Jimmy very clearly.

The lady got red in the face. She handed over the money, took the basket, and followed her husband out. Jimmy, Delia, and Mr. Schuller began to giggle when they were gone.



"Welcome home, Jimmy! You should stay here all the time and help me sell things," said Mr. Schuller at last. "These baskets really are fine. Tell your mother I will get the best prices I can. Here is the money for the one you sold, and for the others I sold for her."

He counted out the money. Jimmy thanked him, but he didn't answer Mr. Schuller's half-joking, half-serious suggestion. Mr. Schuller was nice, but Jimmy did not want to spend his life selling baskets.

Delia was looking at a picture of an Indian riding across the desert.

"That picture is by an Indian artist," said Mr. Schuller. "He went to the Institute of Native American Arts in Santa Fe."

"I would like to be able to paint like that," said Delia after they had left the store. "I wonder how you get to go to that school."

Jimmy shrugged. He did not want to be an artist.

They walked down the street. Delia made them go over to the dress shop so she could look. They passed the Town Hall and police station, the movie theater, the feed store, the drug store, the bank, and the hardware store. They came to the grocery store at last. Mrs. Lewis, who owned it, started to get them the coffee and sugar they asked for. But she had to stop in the middle to answer the phone.

When she came back, she was shaking her head. "That Mrs. Robinson! She wants a whole load of things, but their car broke down. I surely don't have time to drive out there and take them to her. Somebody with a truck could start a delivery service and make a fortune around here!" She finished wrapping up the groceries and handed them to Jimmy and Delia.

"Let's go by the Post Office," said Delia when they were done. "Maybe there will be a letter from Ed. Last time he wrote he said that he liked the Army pretty well. He said he was the best shot on the rifle range."

Jimmy laughed. "Well, that's no surprise! He always could drop a deer with the first shot whenever we went hunting." He supposed he would follow his brother into the Army some day. It didn't sound like something he'd like to do forever, though. He would have to spend too much time away from home.

There was no letter for them today. They were looking at a rodeo poster in front of the Post Office when they heard someone calling them. It was Bill Mackay in his wagon. "Hey! You kids want a ride home?"

They were too polite to ask if he had had any luck, but he told them anyway. He said he was going out to a ranch downriver the next day. They needed another man there.

It was late afternoon by the time they got back to the village. The sun was getting near the horizon. Its slanting rays turned the bare hills to gold. Suddenly there was a rumble behind them, and George Smith flashed by in his new truck. He had saved his pay from the Army to buy it. Now he drove it everywhere. By the time the dust had settled, they were almost home.

Someone waved as they passed the cornfields. It was their mother, her cotton skirts bright against the green of the corn. The corn reminded Jimmy that it would be time for the Corn Dance soon.

One of the horses whinnied. Others answered from the corrals. The wagon stopped in front of the row of houses and Jimmy and Delia got down. Jimmy stood there for a moment, looking around at the village, the fields, the bright line of river and the broad plain and mountains beyond. Once his people had wandered over this whole land....

Suddenly he remembered George Smith in his truck, and what Mrs. Lewis had said about the need for a delivery service. Maybe someday he could get a truck like that. He could go everywhere then, and make money too. He grinned to himself and followed Delia into the house.

Exercise 3. Review

When students have finished reading the story about Jimmy and Delia, reproduce and hand out the exercise on p. 80. In this exercise, students will be asked to compare the ways in which the Valley People meet basic needs and the kinds of jobs or tasks they do in the modern culture with the ways of meeting needs and the jobs and tasks done in the agricultural stage described at the end of Activity 2. Go over the exercise with students to make sure they understand what they are to do, and see that they have paper for the exercise. After they have finished, you can give or read them the sample answers on pp. 81-82.

When students have finished and corrected the exercise, you should probably go over the answers in class. Help students realize that even though many aspects of the Valley People's lives have changed, they still have the same basic needs as they did in their village or wandering days, and that many of the new ways can be adapted to the traditional outlook. As in the previous Activity, the effect of new techniques and resources on lifestyle should be noted.

Additional Activities

In addition to the research project described at the end of Activity 1, possibilities for expansion of this unit include a field trip to a rural town. If some or all of your students have lived in a rural town, they might be asked to write an account of a day in their lives as they were spent in such a town. The class can then compare the activities in these accounts with those of Jimmy and Delia. If students wish, the workgroups might also prepare a report or display giving the history of their tribe(s) since the coming of Europeans, telling both the good things and the bad things that come from the cultural contact.

Additional Resources

Additional resources for this Activity are listed and described in page 166 of this Teacher's Guide.

EXERCISE 3. REVIEW

Look over the history of Golden Valley, the map, and the story about Jimmy Bowman again. Then, on a separate piece of paper, answer the following questions:

1. How do the Indians who live in New Village get the following things? (*Note:* Some things may have more than one source.)

   a. food
   b. clothes
   c. heat
   d. light
   e. housing
   f. transportation
   g. education
   h. health care
   i. religion
   j. tools
   k. defense
   l. government

2. Which things do the Valley People get in the same way they did 200 years ago (at the end of Activity 2)? Which things do they get differently? Show your answer by writing (same) or (different) after each thing you listed in Question 1.

3. a. What kinds of jobs or tasks do the Valley People's men do now?
   b. What kinds of jobs or tasks do the women do now?
   c. What kinds of jobs or tasks do the children do now?
   d. Which of these are the same as the kinds of things they did a hundred years earlier? Which are different? Show your answer by writing (same) or (different) after each thing you listed in Question 3.

ACTIVITY 3

EXERCISE 3 - REVIEW QUESTIONS

1. How do the Indians who live in New Village get the following things?

   a. food: *they grow corn (same), hunt deer (same), buy coffee, sugar, and other things from store (different)*

   b. clothes: *they buy clothes from store (different)*

   c. heat: *from fireplace (same)*

   d. light: *electric light* (remember the poles beside the road?) *(different)*

   e. housing: *stone and adobe houses (same)*

   f. transportation: *walking (same), horses, wagons, railroad cars (different)*

   g. education: *mission and boarding school (different)*

   h. health care: *Public Health Service hospital (different), but maybe they still do ceremonies too.*

   i. religion: *church (different), corn dance (same)*

   j. tools: *hardware store (different), handmade baskets (same)*

   k. defense: *police and army (different)*

   l. government: *BIA agent and Town Hall (different), chief men from tribe (same)*

2. Show which things they get the same way and which differently by writing (same) or (different) after each.

   see above

3. a. What kinds of jobs or tasks do the men do?

hunting (same), work on railroad, ranch hand, army (different)

b. What kinds of jobs or tasks do the women do?

basketmaking, cooking, farming (same)

c. What kinds of jobs or tasks do the children do?

firewood (same), helping get things (different)

d. Which of these are the same as the kinds of things they did a hundred years earlier? Which are different? Show your answer by writing *same* or *different* after each thing you listed in Question 3. See above.

Activity 4. The City

GOAL: To help students understand the basic economic structure of an urban community

OBJECTIVE: The student will describe what conditions can cause a town to grow into a city, and compare the way people meet their needs in a small town versus a city.

WHAT STUDENTS WILL BE ASKED TO DO:

- Read a story about how Golden Valley changed from a small town to a city
- Answer questions about what they have read
- Play the game "The Arrow Express" in which they compute mileage and gas consumption between specific points on a gameboard map; keep accurate written records of trucking operations; and, compute expenses based on given data
- Answer review questions

PROCEDURE

The development of small towns into urban centers is an all too familiar phenomenon of the past quarter century. Not only do many Indians move to the city, but often the city moves to them. It is important for students to understand how to deal with this growth and the kind of life-style which it produces.

If you are located in or near a big city, you may want to begin by asking students to try and remember--and perhaps write a short description of--how they felt the first time they came to the city, what they thought of it, and so on. If they were born in the city, they might discuss how they think a city differs from a small town.

If you are teaching in a rural area, ask how many students have ever been to a big city, and if so, what they thought of it. If they have not been, ask them to describe what they think a big city is like.

Exercise 1. The Golden City

Reproduce and hand out, or read aloud, the material on pp. 84-88. This reading tells how Golden Valley changed from a little country town into an urban center. The description points out the relationship among such factors as natural resources, population, and industrial development. The implications for land use and lifestyle are also discussed. A map of Golden Valley at this period is also included and should be passed out or shown on an overhead projector. When students have finished with the reading, hand out or ask in discussion the questions on p. 89 . In order to answer these questions, students will need both the map and copies of the reading to refer to. Sample answers are provided on page 90.

Activity 4. The City

EXERCISE 1. GROWING

Some communities stay the same for hundreds of years. Others change in many ways. Often, a community that is changing is a community that is growing. Changes may be fast or slow. They may be planned or they may be things that just happen.

When a small town starts to grow, the people who live there usually try to deal with the changes one at a time. Often, they are so busy doing this that, before they really know it, their small town has become a city.

To exist, a city must have at least three things:

1. many businesses and industries;
2. a large population; and,
3. a lot of natural resources and power, or a way to get them.

In the next reading, you will find out how Golden Valley changed from a small town to a city. You will also see how this growing changed the lives of the people who lived there.

THE GOLDEN CITY

A hundred years ago, many of the people in Golden Valley worked in copper mines and silver mines. As the copper and silver began to run out, however, the kinds of jobs that people did began to change. Golden Valley became a quiet place of farms and ranches. It stayed this way until, in the 1940's, someone discovered oil there.

The discovery of oil suddenly changed everything. Many people came to drill oil wells. Others arrived to process the oil. These new people saw that the valley was a nice place to live and sent for their families. As more and more people arrived, more and more houses were needed. A company was set up to cut down trees in the mountains. Soon a mill was built at Silverado to provide lumber. Meanwhile, other companies were set up to do other things. Vacation spots were built at Lake Roosevelt and Copper Mountain.

As more people arrived, Golden Valley not only needed more houses. It needed stores, hospitals, police, a sanitation service, and many other things. Soon some furniture companies came to the valley and began to use the wood. Other companies came and built factories to make machines, clothing, dishes, and other products that the growing community would need.

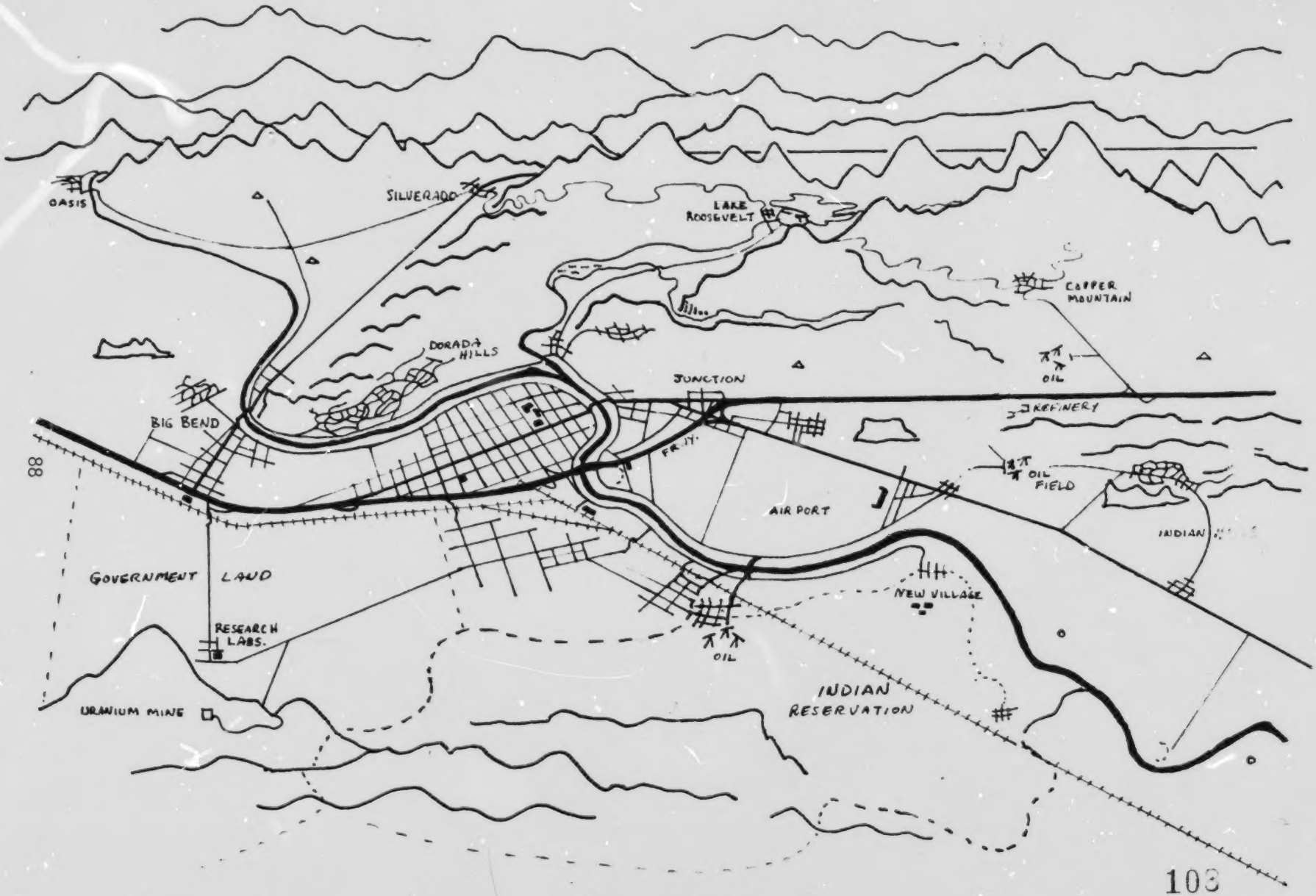
Golden Valley grew in many ways. Soon the community had a City Hall, a courthouse, a County Hospital, a Community College, and many new schools. There were also stores of all kinds, theatres, beauty shops, libraries, a bus station, churches, printing shops, gas stations, car repair garages, plumbing companies, electrical repair shops and also a museum near the ruins of First Village.

In the 1950's, uranium was discovered. This brought more changes. A Research and Test Station was started. An airport was built. More people came to live and work. By this time, most of the farm land had houses or factories built on it. Since the remaining farms could not produce enough food for all the people, extra food was brought in by truck and railroad from other places.

Fortunately for the Valley People, oil was discovered on the reservation too. The oil-field provided work for many of the Indians, and the lease earned money for the tribe. They needed the money because all the industry and sewage were polluting the Dorada river, and the water had to be purified before it could be drunk or used on crops.

The tribal government had been reorganized, so that now the tribe had its own constitution and elected leaders. Some of the younger people in the tribe had gone to the community college, or had advanced training from other places. The tribe now had among its own people one doctor, a nurse and several health aides, three teachers, one nationally known artist, a couple of businessmen, an engineer, and one man who bought land next to the reservation and started a ranch. One young man was now in law school. As the city grew, many members of the tribe, whose numbers were increasing, moved into the city and took jobs there. Some families left the reservation every harvest time and earned money picking crops elsewhere in the valley, in the state, and even in other states.

Life was still hard for the Valley People but they were beginning to learn how to live near a city, while still keeping the tribe alive on its own land.



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GOLDEN VALLEY AROUND 1960

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ACTIVITY 4

Questions for Exercise 1. Growing

You have just found out how Golden Valley turned into a city, and seen a map of the way it looks now. Compare this map with the one of Golden City in 1940. When you have looked at the two maps, answer these questions:

1. What are three things that a city needs to exist?

   a.

   b.

   c.

2. When a new industry is started in an area, many workers move in.

   a. What other kinds of people move in?

   b. Why do they move in?

3. If an area doesn't have some things its people need, such as food, can a city still exist there?

   How?

4. Once people worked in their own fields to grow food for their families. Now many of the Valley People go far away to help grow food in other places.

   List two ways in which they are still helping to feed their own people.

   a.

   b.

5. List one way in which having a city nearby is good for the Valley People, and one way in which it is bad.

   a.

   b.

ACTIVITY 4 *Sample Answers*

Questions for Exercise 1. Growing

You have just found out how Golden Valley turned into a city, and seen a map of the way it looks now. Compare this map with the one of Golden City in 1940. When you have looked at the two maps, answer these questions:

1. What are three things that a city needs to exist?

   a. *many businesses and industries*

   b. *large population*

   c. *natural resources and power or a way to get them*

2. When a new industry is started in an area, many workers move in.

   a. What other kinds of people move in? *house builders, storekeepers, teachers and doctors, etc. also the workers' families*
   b. Why do they move in? *to provide the things that the workers and their families will need.*

3. If an area doesn't have some things its people need, such as food, can a city still exist there?

   Yes

   How?

   If there is transportation to bring the missing items from somewhere else.

4. Once people worked in their own fields to grow food for their families. Now many of the Valley People go far away to help grow food in other places.

   List two ways in which they are still helping to feed their own people.

   a. *the food grown elsewhere may be sent to Golden Valley and eaten there.*

   b. *the money they earn working can be used to buy food.*

5. List one way in which having a city nearby is good for the Valley People, and one way in which it is bad.

   a. *the city is good because it offers more and more different jobs, and more sources of everything people need.*

   b. *the city is bad because it has polluted the river.*

Exercise 2. The Arrow Express Service

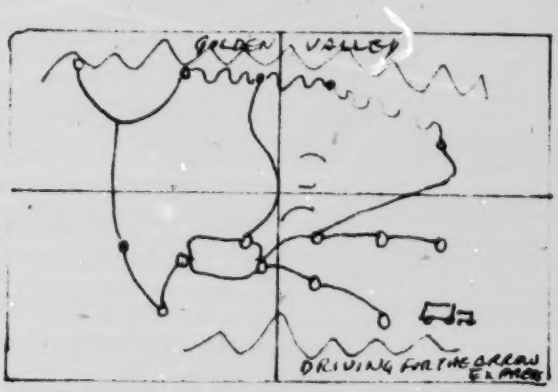
The introduction to this game tells how Jimmy Bowman, the protagonist of the story in Activity 3, has grown up and started a trucking company as he decided to do at the end of the story. The introduction is followed by instructions for playing the game.

In this game, the student functions as a small family trucking company owner-driver who must figure out the most economical and efficient use of equipment, given a random sequence of pick-ups and deliveries. The student decides what routing system to use and how to schedule the pick-ups and deliveries. Each has a marker on the board depicting the location of the truck. Moves are accomplished by rolling dice until the truck has enough gas to move from one town to the next. Each student has five cards dealt to him which indicate where the cargo is to go. After each completed delivery, the student draws a card from the deck so that there are always five in the stack until the deck diminishes. The first one to complete all deliveries has contributed the most to the company. Scoring is accomplished by counting the cards used.

Preparing Materials

Before students can play this game, you will have to prepare enough copies of the following materials for everybody. These include:

1. *The Gameboard*
   Masters for the gameboard are included on pages 94-97 in this Teacher's Guide. These pages should be xeroxed or put onto ditto masters. The board is divided into four masters. After they have been reproduced, tape them together to form the gameboard. You may want to glue them to a cardboard backing to increase durability.
   The gameboard may also be covered with plastic. Once made, gameboards can be used again. You will need one completed gameboard for each three to six students (for each workgroup).



Mileage between points on the map is indicated; e.g., the distance from "Oases" to "Big Bend" is shown as 296 miles. The player may move in any direction on the board. Obviously, the player will try to minimize the mileage in order to complete his deliveries faster. Each player starts at "City Center." If, for example, the player has to make his first pick-up at the Research Lab he must roll the dice until he has enough gas in his truck to make the trip. The player is limited, however, to three tosses, and by the fact that his truck will hold a maximum of forty gallons of fuel. Also, each truck gets nine miles to the gallon. Thus, the player would need at least twenty-eight gallons before he could move his truck from the start to Lake Roosevelt, a distance of 215 miles. He need not have enough gas for the *entire* trip, but at least enough to get the truck from point to point along the way before he can move his marker.

The students should be briefed on the importance of tactics; i.e., plan for the shortest, fastest route, bearing in mind sequences of pick-ups and deliveries. Obviously, they want to avoid back-tracking insofar as possible. The more deliveries made, the higher the score.

At specific points on the map, the player will be required to perform additional chores for which he gets extra points. These are shown in the student's instructions.

The player is instructed in a "Special Rule" to contact you the *first* time he reaches either Silverado or Lake Roosevelt. There is a 2 page Expense Account Worksheet for Silverado, and a 2 page Trouble Report--full of mistakes--for the player to correct at Lake Roosevelt. These two chores provide a chance for the player to pick up extra points.

If you have time to discuss the game when students have finished playing, you might find out if students have noticed the parallel between the relationship between energy (ability to move) and fuel (food and water) in the Survival Game in Activity 1 and the relationship between movement of the truck and fuel in the game they've just played.

2. *Delivery cards*
   You will need one deck of 78 cards for each group of students. Masters for cards are on pp. 98-107 of this book.

3. One copy of the following for *each student:*
   Driver's Mileage Record (p.108)
   Trucker's log (p. 109)
   Lake Roosevelt Trouble Report (p. 110 and 111)
   Silverado Expense Account (p. 112 and 113)

4. *Tokens and Dice*
   Each group will need a pair of dice, and each player will need a token. Tokens from the game in Activity 1 can be used, or students can cut out cardboard trucks, use miniature plastic toy trucks, etc.

   Having two pairs of dice per group and rolling them together will make the game go faster.

Introducing the game

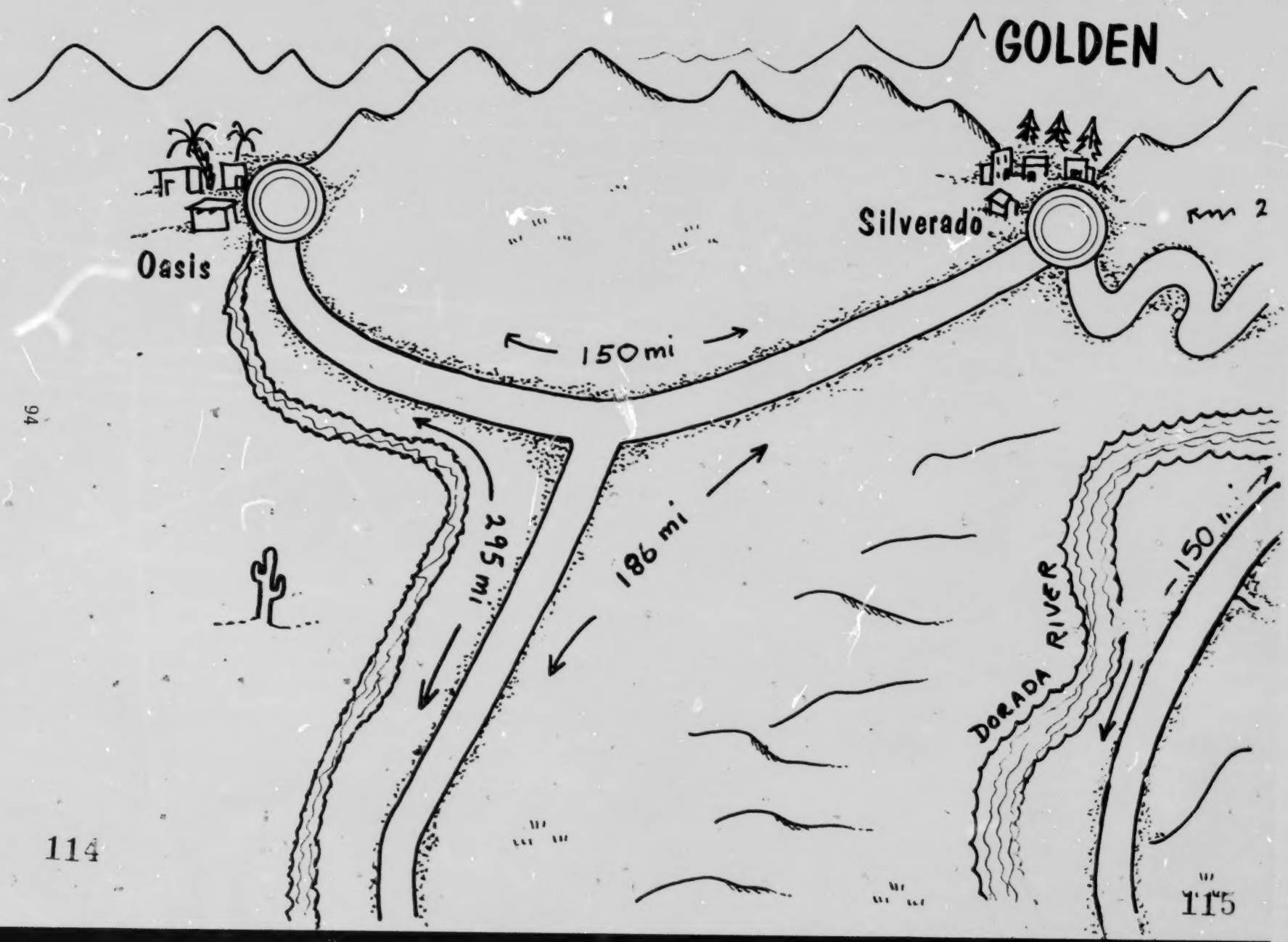
Read or reproduce and hand out pp. 114-115, which tell story of how Jimmy Bowman actually started his trucking business. You may want to point out how well Jimmy has adapted to the changes in his environment. He has learned to use the changes to develop a lifestyle and a source of income that would not have been possible before. Explain that in this game, students will be in the position of friends or members of Jimmy's family who are working as hard as they can to make sure that the business prospers. The extra strength given the company by the fact that employees are trying to help each other, rather than compete against each other, might be pointed out.

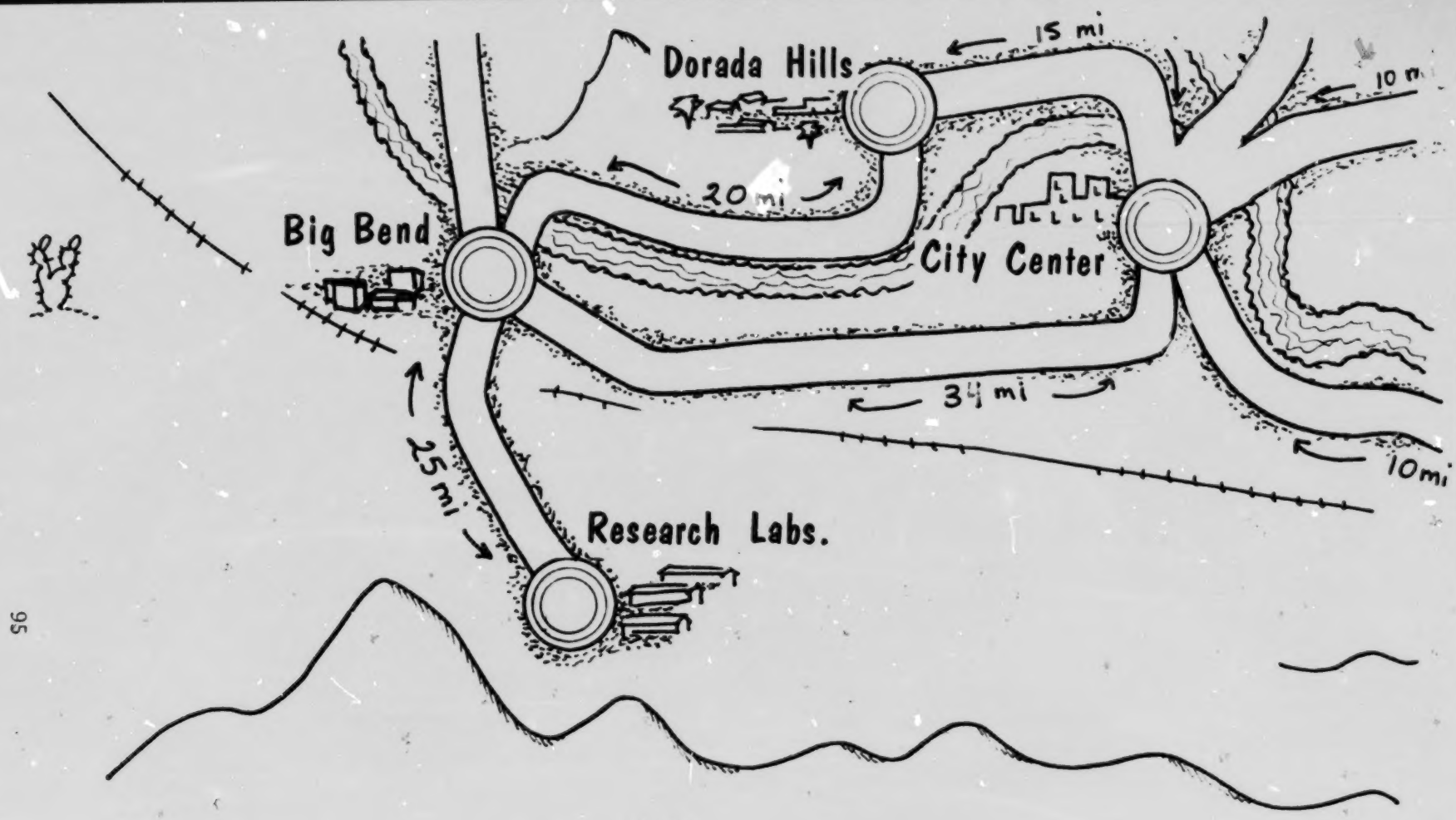
Playing the game

Instructions are on pp. 116-119. Reproduce and distribute them to students. Ask them to follow along as you read the instructions aloud. If necessary, elaborate on the instructions on the basis of the descriptions of the game given here.

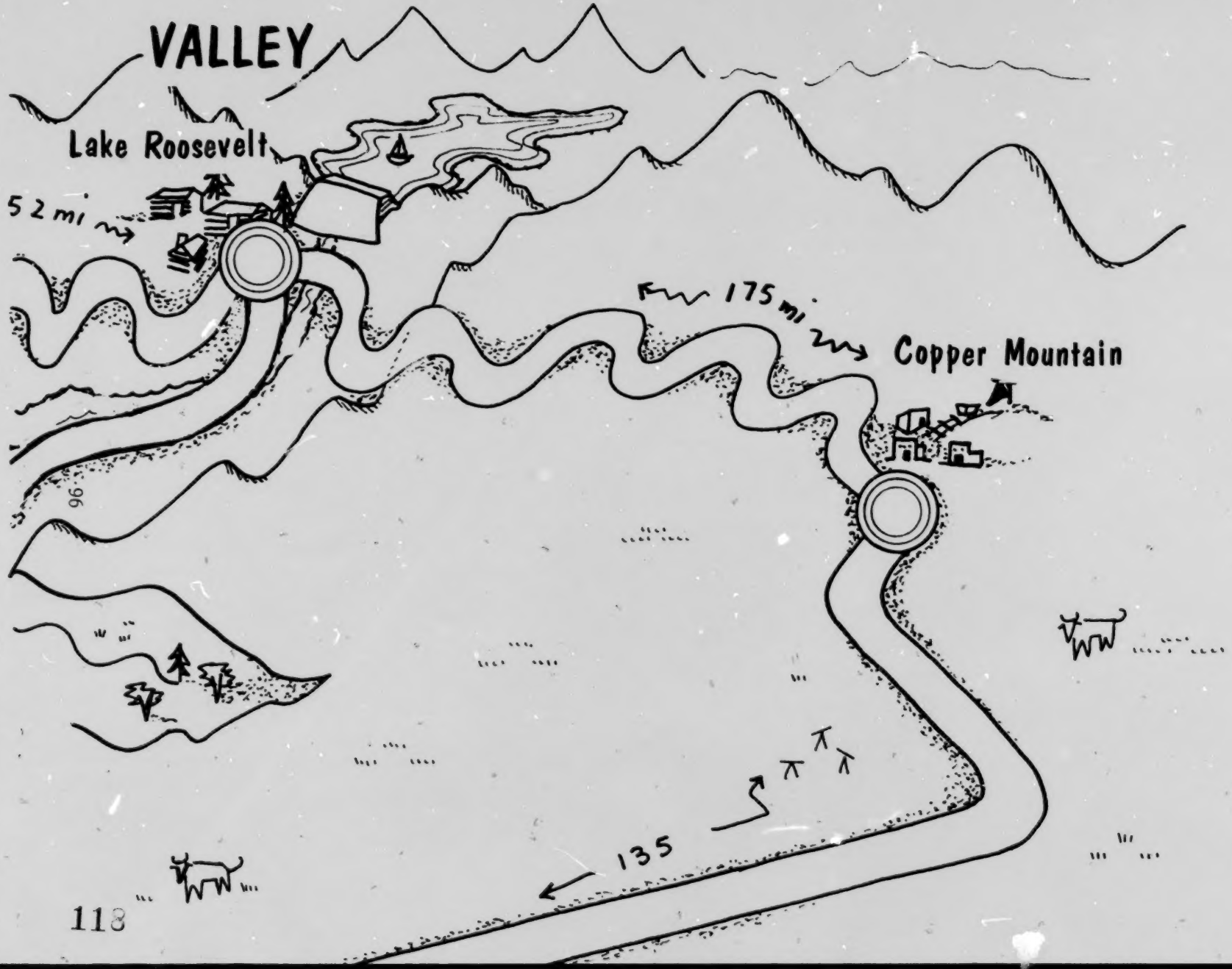
Each player is dealt five cards at the start of play. By looking at the map (gameboard), each player tries to determine the most efficient way of moving his truck to accomplish the work specified on the cards. Once the player makes the decision as to which card he will use first, he places it face up on the table and writes the data in his "trucker's log."

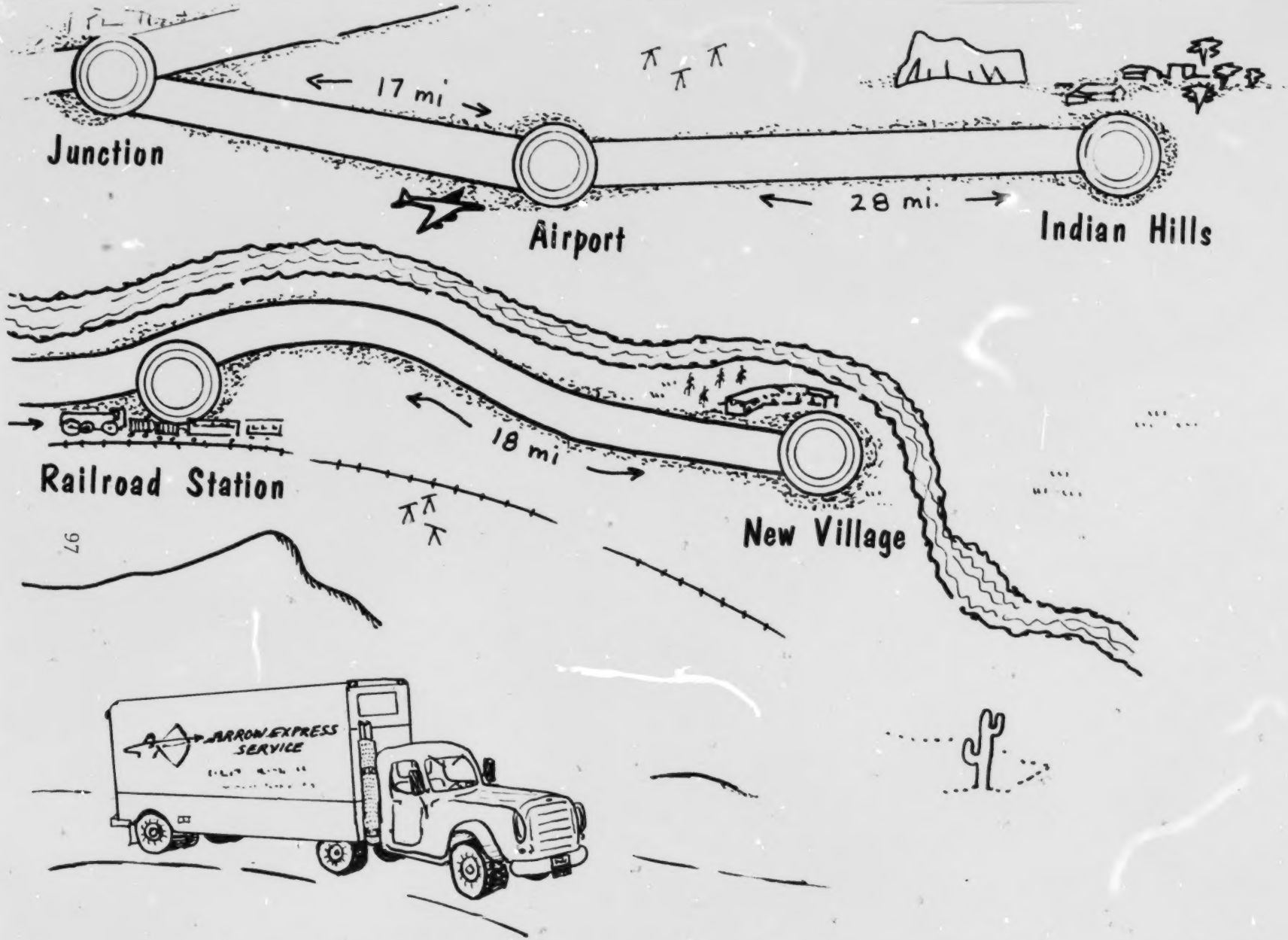
The player *must* make that pick-up and delivery before selecting another card from his stack. As the player makes a delivery, that card is placed aside to be used in scoring. The player draws another card from the stack remaining after the deal, so that he always has five cards to choose from. When he draws, the strategy may change, so the player should be urged to be careful and remain flexible.


GOLDEN
Silverado
Oasis
150mi
295 mi
186 mi
DORADA RIVER
150
94
114
115



DRIVING FOR THE ARROW EXPRESS


VALLEY
Lake Roosevelt
52 mi
175 mi
Copper Mountain
96
135
118
113


17 mi
Junction
Airport
28 mi.
Indian Hills
18 mi
Railroad Station
New Village
ARROW EXPRESS SERVICE

97

CITY CENTER to JUNCTION

2 doz. sacks oats from Johnson's Feed Co. to Valley Feed Store

CITY CENTER to AIRPORT

36 precision microscopes from Shore Instrument Co. to Los Angeles, Ca.

CITY CENTER to INDIAN HILLS

4 cases paper towels from Nugget Warehouse to Shopping Center

CITY CENTER to RAILROAD

25 boxes shirts from Dorada Designs to Houston, Tex.

CITY CENTER to NEW VILLAGE

mixed load of canned goods from Nugget Warehouse to General Store

CITY CENTER TO SILVERADO

30 cases beer from Jacobsen's Distributors to Silverado Saloon

CITY CENTER to BIG BEND

6 doz. loaves Golden Grain bread from bakery to Riverside Market

CITY CENTER to DORADA HILLS

15 evening dresses to local branch of Golden Valley Department Store.

CITY CENTER to OASIS

6 cases assorted drugs from Jacobsen's Distributors to Desert Drugs

RAILROAD to CITY CENTER

50 crates fresh California Lettuce to Nugget Warehouse

RAILROAD to RESEARCH LABS.

4 crates lead shielding from Nevada

RAILROAD to LAKE ROOSEVELT

5 crates rustic dishes (made in Japan) to Belle's Noveltie Shoppe

RAILROAD TO COPPER MOUNTAIN

2 crates heavy equipment parts to Blue Bell Mine

RAILROAD to NEW VILLAGE

4 cartons government forms from BIA to Agency office

RAILROAD to BIG BEND

2 doz. Sealy mattresses to Sleep-eze Furniture Co.

RAILROAD to Oasis

25 cases Coca Cola to Oasis Cafe

RAILROAD to SILVERADO

18 crates canned peaches to Silverado Store

RAILROAD to JUNCTION

3 boxes Volkswagen parts to Junction Garage

AIRPORT to CITY CENTER

1 carton containing 4 new movies for Dorada Theater

AIRPORT to BIG BEND

rush order textbooks to Big Bend Community College

AIRPORT to NEW VILLAGE

medical supplies to Public Health Service hospital

AIRPORT to RESEARCH LABS.

3 cases chemicals--Handle With Care!

AIRPORT to COPPER MOUNTAIN

6 precision drill heads to Blue Bell Mine

AIRPORT to DORADA HILLS

2 boxes orchids to Priscilla's Flower Shop

AIRPORT to OASIS

1 case airconditioner filters to Oasis General Store

INDIAN HILLS to CITY CENTER

22 unsold silk scarves from Shopping Center back to Golden Valley Department Store

INDIAN HILLS to BIG BEND

one load household goods for Smith family

INDIAN HILLS to DORADA HILLS

1 box hand-made pottery from L. Silver to Dorada Interiors

INDIAN HILLS to AIRPORT

1 box with homemade grape jelly from Mrs. Herrington to her daughter in San Francisco

INDIAN HILLS to COPPER MOUNTAIN

3 crates fresh tomatoes from Johnson's Farms to Blue Bell General Store

INDIAN HILLS to JUNCTION

5 crates fresh tomatoes to Junction Grocery

JUNCTION to RAILROAD

50 frozen sides of beef to be sent to Los Angeles, Ca.

JUNCTION to CITY CENTER

20 crates of eggs from Red Hen Farm to Nugget Warehouse

JUNCTION to AIRPORT

3 boxes Valley Gold Butter to Airport restaurant

JUNCTION to INDIAN HILLS

3 crates of eggs from Red Hen Farm to Shopping Center

JUNCTION to COPPER MOUNTAIN

2 frozen sides of beef from Warren's Ranch to Blue Bell Store

JUNCTION to DORADA HILLS

4 boxes Valley Gold Butter to Dorada Specialty Market

JUNCTION to OASIS

4 frozen sides of beef from Warren's Ranch to Oasis General Store

COPPER MOUNTAIN to RAILROAD

1 load copper ingots to Chicago

COPPER MOUNTAIN to AIRPORT

2 boxes copper ashtrays from Old Timer Crafts to airport gift shop

COPPER MOUNTAIN to CITY CENTER

6 boxes copper ashtrays from Old Timer Crafts to Golden Valley Department Store

COPPER MOUNTAIN to SILVERADO

6 reels copper wire from Blue Bell Copper Works to Timberline Mill

COPPER MOUNTAIN to LAKE ROOSEVELT

1 box thin sheet copper from Blue Bell Copper Works to Camp Pioneer

COPPER MOUNTAIN to DORADA HILLS

1 box copper ashtrays from Old Timer Crafts to Dorada Interiors

COPPER MOUNTAIN to RESEARCH LABS.

1 box ore for analysis from Blue Bell Mine

NEW VILLAGE to CITY CENTER

3 paintings by Delia Bowman to Chekhoff Galleries

NEW VILLAGE to DORADA HILLS

6 baskets by Louisa Mackay to Dorada Interiors

NEW VILLAGE to AIRPORT

1 crate with 6 paintings by Delia Bowman to exhibit in New York

NEW VILLAGE to BIG BEND

3 baskets by Mary Bowman to Big Bend Community College Museum

NEW VILLAGE to LAKE ROOSEVELT

1 box Indian corn to Camp Pioneer

RESEARCH LABS. to RAILROAD

25 barrels uranium oxide to Los Alamos - Handle With Care!

RESEARCH LABS to AIRPORT

1 box with 20 copies project report to Atomic Energy Commission in Washington

RESEARCH LABS to CITY CENTER

1 box negatives to Photo-Quik labs. for special processing

BIG BEND to RESEARCH LABS.

1 box assorted office supplies from Big Bend Business Co.

BIG BEND to RAILROAD

48 easy chairs from Big Bend Furniture Co. to Phoenix, Az.

BIG BEND to OASIS

6 double beds from Sleep-eze Co. to Desert Palms Motel

BIG BEND to CITY CENTER

4 dining room sets to Golden Valley Department Store from Big Bend Furniture

BIG BEND to LAKE ROOSEVELT

6 ping pong tables from Smith Co. to Camp Pioneer

BIG BEND to SILVERADO

1 pair twin beds Sleep-eze Co. to Silverado Hotel

BIG BEND to AIRPORT

1 executive desk from Big Bend Furniture Co. to Airport Manager

SILVERADO to Oasis

2 doz. two by fours from Timberline Lumber to Valentino Date Farms

SILVERADO to LAKE ROOSEVELT

300 board feet knotty pine boards to Wilson Construction Co.

SILVERADO to BIG BEND

1 load seasoned pine boards from Timberline Lumber to Big Bend Furniture Co.

SILVERADO to RAILROAD

1 load plywood from Timberline Lumber to Santa Fe, N.M.

SILVERADO to JUNCTION

1 load fence posts from Timberline Lumber to Warren's Ranch.

SILVERADO to COPPER MOUNTAIN

1 load support timbers from Timberline Lumber to Blue Bell Mine

SILVERADO to CITY CENTER

120 reams bond from Silverado Paper Co. to Golden Valley Office Supplies

SILVERADO to DORADA HILLS

60 reams card stock from Silverado Paper Co. to Dorada Fine Printing

LAKE ROOSEVELT to CITY CENTER

12 paintings from Crafts Outlet to Chekhoff Galleries

LAKE ROOSEVELT to DORADA HILLS

1 box wall hangings from Crafts Outlet to Dorada Interiors

LAKE ROOSEVELT to SILVERADO

1 box with model log cabins by Ozzie White to Timberline Trading Post

LAKE ROOSEVELT to AIRPORT

1 box with model log cabins by Ozzie White to airport gift shop

OASIS to BIG BEND

1 defective bedstead being returned by Desert Palms Motel to Sleep-eze Co.

OASIS to RAILROAD

20 crates Valentino dates to Chicago.

OASIS to CITY CENTER

15 crates Valentino Dates to Nugget Markets Warehouse

DORADA HILLS to CITY CENTER

500 invitations to Mayor's Banquet from Dorada Fine Printing

DORADA HILLS to AIRPORT

50 menus from Dorada Fine Printing to airport restaurant

DORADA HILLS TO BIG BEND

200 wedding invitations for Alice Weems from Dorada fine printing

DRIVER'S MILEAGE RECORD

Gallons Put In	Miles Traveled	Gallons Remaining

TRUCKER'S LOG SHEET

Pick-Up Town	Delivery Town	Check Completed Delivery

LAKE ROOSEVELT TROUBLE REPORT

You are one of the clerks working for the Arrow Express Service. Your job is to type up the reports and letters. You are proud of your ability to write well and often are called upon to rewrite material written by other workers.

Right now you have been asked to correct a report written by one of the drivers. There were some problems with a shipment he delivered, and the boss felt that the report should be sent to the sender as evidence. To get extra points in the game, follow the instructions below.

INSTRUCTIONS:

On the next page you will find a report. Read the report carefully. The writer's specialty is driving a truck, not writing, and the report has a number of mistakes. There are some misspelled words, some words used wrongly, and some places where the writer uses present tense instead of past. Cross out and correct the mistakes. A few have already been corrected to show you what to do.

TO: Jim Bowman, President

FROM: Joe Smith and Sam Badger, Drivers

SUBJECT: Trouble Report

Corrected by_____

Deer Jim:

Sam and ~~me~~ I left the garage in City Center at 7:00 Tuesday morning, and went by the Railway Station to pick up the load. We didn't have ~~no~~ any trouble ~~trouble~~ until we ~~was~~ were on the freeway and we ~~mosta~~ must have hit a nail or something because we ~~blowed~~ blew a tire. We almost ~~runned~~ ran off the road then, but I got her over to the side and we fixed the tire.

When we got to Copper Mountain, we deliver the canned goods to the Hi Ho Restaurant like we was supposed to, and then we buyed some new tires becuz the road from Copper Mountain to Lake Roosevelt is in bad shape, and we didn't wanna get stuck in the mountain pass at nite. On the way to Lake Roosevelt we runned over a chuck hole, and there was a thud and a crash in back. It turned out the two boxes we was taking to Lake Roosevelt had broke loose, so we tied them down again and went on. We got in after midnite, and went to bed.

In the morning we take the boxes over to Belle's Noveltie Shoppe, Mrs. Belle hasta look at the stuff before she would sign, and it was dishes, and half of them was broke. She was real mad and says we should pay for the broke ones. But Mr. Bowman, there wasn't no soft packing around those dishes, and no FRAGILE sign on the box--how was we to know it was breakable stuff?

We're real sorry about the dishes, but we don't think it's all our fault.

Yours truly,

Joe Smith

SILVERADO

EXPENSE ACCOUNT SHEET

You have just made your first delivery to Silverado. Now something is wrong with your truck and you will have to stay here for 2 days while the truck is being fixed. Your brother is with you. To get extra points in the game, figure out how much money you and your brother must spend to stay in Silverado for these 2 days. Below are the facts you will need to know to figure this out.

FACTS

1. Motel cost: $8.50 per day, per person
2. Meals cost: $6.00 per day, per person
3. Cleaning and Laundry:

   You: $2.00

   Brother: $1.80
4. Truck repairs:

   Parts: $26.00

   Labor: $ 4.00/hour for 7 hours
5. General expense for truck operations:

   12¢ per mile from point you just left to Silverado (see card).

On the next page you will find a worksheet where you can show your answers.

TO: Ross Mackay, Company Accountant
FROM: _____
SUBJECT: Expenses for Silverado

This is how much my brother and I spent during our 2 days in Silverado.

1. *Hotel*
   $8.50 rent
   x 2 days
   [ ] rent for one person
   x 2
   $[ ] rent for two people

2. *Meals*
   $6.00 per day
   x 2 days
   [ ] meals for one person
   x 2
   $[ ] meals for two people

3. *Cleaning and Laundry*
   $2.00 for me
   + 1.80 for my brother
   $[ ] for both of us

4. *Truck Repairs*
   $4.00 labor per hour
   x 7 hours
   [ ] total labor
   + 26.00 for parts
   $[ ] total cost

5. *General Expenses*
   [ ] number of miles from my last stop to Silverado
   x 12¢ per mile
   $[ ] total cost

6. *Total Expenses*
   Add the totals from 1,2,3,4 and 5

   [ ] total rent
   [ ] total meals
   [ ] total cleaning/laundry
   [ ] total truck repairs
   [ ] total general expenses

   $ [ ] TOTAL EXPENSES

7. When you have finished this expense account sheet, give it to your teacher. You will get extra points added to your score for every right answer!

EXERCISE 2. THE ARROW EXPRESS SERVICE

In Activity 3 you read a story about Jimmy Bowman, who was a boy in Golden Valley when it was still a small town. At the end of the story he was thinking of starting a Delivery Service when he grew up. Did you wonder what happened to him?

When Jimmy got out of school he went into the army where he learned something about auto mechanics. He also took some Junior College courses. When he got back home, he bought his first truck and started delivering groceries for the store and carrying whatever else people needed moved. When the oil company arrived, Jimmy had a lot more work. With the money he made, Jimmy bought another truck and his brother joined him in the business. His sister Delia, who had become an artist, designed the emblem for the new company.

As Golden Valley grew, "The Arrow Express Service" grew with it. When the community college was started, Jimmy went back to school and took courses in business administration so that he would know how to keep his company accounts, handle taxes, and manage his company successfully.

Soon Jimmy's brother-in-law, his cousin, and two other fellows from the village were all driving Arrow trucks. Jimmy's sister became vice-president of the company. Two women from the tribe who had been to business school were hired as secretary and accountant. The husband of one of them was a good mechanic and joined them to keep the trucks in repair.

Jimmy moved his family into the city so he could be near his office. His children went to the city schools. While running his business, Jimmy spent a lot of time helping out at the Urban Indian Center. His wife set up a tutoring program there.

But Jimmy had problems, too. As the city grew, other trucking firms moved in. Some of them were part of national companies. To make a good living for their families, Jimmy and his staff had to work hard. They had to get goods from one place to another safely, quickly, and cheaply so that the people would keep using their service.

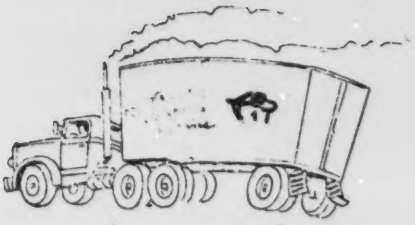
What kinds of goods did they carry?

What problems did they have?

Why was a trucking firm needed in Golden Valley when they had a railroad station and an airport and so many people had cars?

The game, "On the Road" will help you find the answers to these questions. To find out how to play the game, turn to the next page.

ON THE ROAD



HOW TO PLAY THE GAME

1. Look the game board over carefully, and become familiar with it.
2. Your teacher will give you some things to play the game. Make sure the group has a pair of dice and a deck of game cards. Make sure that each player has a marker, a *Driver's Mileage Record*, and a *Traveler's Log Sheet*.
3. There should be at least three players at each game board.
4. You will be operating as one of the Drivers for the Arrow Express Service. You and the other players should try to make as many deliveries as you can so that the company will do well.
5. Place your trucks (markers) on START.
6. Roll the dice to see who is Dealer. High roll is Dealer.
7. Dealer gives five cards to each player. Left-over cards are stacked where each player can reach them.
8. Each card stands for a delivery that has to be made. It tells you where to pick up goods and where to deliver them.
9. STRATEGY: Look at all five cards. Study the board. Try to figure out the best route to make all your pickups and deliveries. Try to make your first delivery nearest the place where you have to make your next pickup.

10. HOW TO MOVE YOUR TRUCK:

(a) Your truck holds 40 gallons of gas.

(b) You get 9 miles to the gallon. With a full tank you can go 40 x 9 or 360 miles.

(c) With your truck on START, roll the dice. Add up the total... That's how many gallons you get. *You must roll until you have enough gas to get to the next stop.* *But,* you can't roll more than three times in any one turn. Keep track of your gas on your *Driver's Mileage Record.* As you move your truck, you are using gas, so you have to keep a record so you'll know when to add more.

11. Decide which delivery to make first. Then turn that card face up and write the information on your *Trucker's Log Sheet.* When you finally make enough moves to complete the delivery, *draw another card from the stack* so that you always have five cards.

WARNING

Write only one delivery at a time on your *Trucker's Log Sheet.* Why? Because, when you make a delivery and draw another card, the new card might change your plans. After you have written the delivery information on the sheet, *you can't change your mind.*

12. REVIEW

(a) Deal five cards.

(b) Decide which delivery you are going to make first.

(c) Roll dice to put gas in your truck.

(d) Move the truck when you have enough gas to get to where you have to go.

(e) Remember to keep delivery and mileage records.

13. SPECIAL RULE

As you play, tell your teacher the *first* time your truck arrives in Silverado or Lake Roosevelt. The teacher will show you how to pick up extra points for your first trip through those towns.

GOLDEN VALLEY DISTANCES FROM PLACE TO PLACE :

Oasis to Silverado . . . . . .150 mi.

Oasis to Big Bend . . . . . .295 mi.

Silverado to Big Bend . . . . . .186 mi.

Silverado to Lake Roosevelt . . . . .252 mi.

Lake Roosevelt to City Center. . . . .150 mi.

Lake Roosevelt to Copper Mountain. . .175 mi.

Copper Mountain to Junction . . . . .135 mi.

Indian Hills to Airport . . . . . 28 mi.

Airport to Junction . . . . . 17 mi.

Junction to City Center . . . . . 10 mi.

New Village to Railroad Station . . . 18 mi.

Railroad Station to City Center . . . 10 mi.

City Center to Dorada Hills . . . . . 15 mi.

Dorada Hills to Big Bend . . . . . 20 mi.

City Center to Big Bend . . . . . 34 mi.

Big Bend to Research Labs. . . . . 25 mi.

Exercise 3. Review Questions

The purpose of these review questions, which are on pp. 121-122 of this book, are to help the students assimilate the information they have gained from the readings and the game in order to develop certain basic concepts.

In this exercise, the question of roles and tasks again becomes important. Who should do what is a matter which is in a state of transition in both non-Indian and Indian cultures. One of the challenges facing young Indians is how to retain traditional cultural values while taking advantage of the opportunities offered by the new flexibility in role definition. From one point of view it is desirable to emphasize the parallels between the old ways and the new, but when such an identification seems to prescribe that men or women do only certain kinds of jobs (and when the physical requirements of the jobs no longer force a sexual differentiation) it becomes unproductive.

The trucking game, for instance, seems to imply that all the drivers are male. While it is possible that women might serve as drivers, in such a situation it is more likely that women would contribute clerical services. However, it is certainly useful to both boys and girls to consider the problems a truck driver faces.

The ability to answer the questions in this exercise will depend to a great extent on the students' abilities to note and remember relevent information. You may help students as they work by reminding them to consult the map, and noticing *what* the trucks carried, where, and why.

For sample answers, see pages 123-124.

Optional exercises

In addition to the audio-visual materials listed on pp. 166-173 of this book, this activity might be expanded by the following:

Looking through the Yellow Pages of a city phone book to see what kinds of businesses are listed;

Having a truck driver or service employee come speak to the class, arrange a visit to the offices of a trucking firm.

EXERCISE 3. REVIEW

After reviewing the readings and taking another look at the information on the game card, answer these questions:

1. Name three reasons that people in Golden Valley can no longer produce all their own food.
2. Where does the clothing worn by people in Golden Valley come from?
3. What are some ways--other than by truck--that goods and raw materials get to Golden Valley?
4. Describe one thing about the way in which people meet their needs in a small town and in a city that is the same, and one thing that is different.
5. If six people who live in a small town all want to start grocery stores there, do you think they will be able to succeed? Why or why not? Will this answer change if they live in a city?

6. Opinion question:

Copy down the following job titles. After each one, write down down whether you think they are usually performed by men or women. Then, think about what you know of the job, and write down whether you think it *must* be done by a man *or* a woman, or whether it doesn't matter, and why.

doctor	artist
truck driver	farmer
company president	law officer
teacher	clerk
storekeeper	rancher
mechanic	maker of clothing
accountant	carpenter
political leader	

ACTIVITY 4
EXERCISE 3

1. Name three reasons that people in Golden Valley can no longer produce all their own food.

   a. *there are too many people for the Valley's food-producing capacity.*

   b. *much of the farm land has been built over.*

   c. *food can be brought in from other areas.*

2. Where does the clothing worn by people in Golden Valley come from?

   Some of it is made in the city, and some is brought in from elsewhere by train.

3. What are some ways--other than by truck--that goods and raw materials get to Golden Valley?

   By railroad and by airplane.

4. Describe one thing about the way in which people meet their needs in a small town and in a city that is the same, and one thing that is different.

   a. *In both a town and a city, the people buy things instead of making everything for themselves.*

   b. *In a city, the people have a wide choice of what to buy and where to buy it. In a small town, there is usually only one of each kind of store.*

5. If six people who live in a small town all want to start a grocery store there, do you think they will be able to succeed? Why or why not? Will this answer change if they live in a city?

A small town would probably not have enough people to keep six grocery stores going, so some of the people would have to go elsewhere or do something else. In a city there would be more people needing food, and all six might succeed in starting stores.

6. Opinion question:

The answer to this question will depend on what *you* think. But here are some points to think about as you look at your answers. Whether a job is done by a man or a woman depends somewhat on *where* the job is to be done. Once women took care of the children and the homes and did little else, so most of those jobs were done by men. In the country, or in conservative areas, this is often still true. These days, however, there are some women doing all those jobs, although in some areas--like truck driving and mechanics--there are very few.

Should certain jobs be done by men or women? People usually give two reasons when they say that a certain job should be done by a man and not a woman. The reasons are: 1) that the job has to be done by someone who is very strong; and 2) that men have always done that kind of job in the past and that, therefore, they should do it now.

What do you think?

Activity 5. Mapping The Future

GOAL:	To help students understand how economic and cultural considerations should be applied in planning a community.
OBJECTIVE:	Students will read about community planning and apply this and what they have learned in previous Activities to plan a modern Indian Community.

WHAT STUDENTS WILL BE ASKED TO DO

- Read a description of Golden Valley's further development and changes in the situation of the Valley People, look at a new map, and answer simple questions.
- Play role of a tribal planning commission member and plan a new Indian community, taking into consideration cultural and economic factors already known and predicting patterns for future. Planning includes choosing a site, indentifying community needs, and designing the community.
- Evaluate the community planning done by another workgroup.

MATERIALS NEEDED

- *For Exercises 1,2, and 3:* Pencils and paper
- *For Exercise 2:*

1 Set per Workgroup:
- 1 copy of each of pages 135-140 of Teacher's Guide
- 1 piece cardboard or stiff paper
- erasers
- tape
- crayons, colored pencils or paints
- scissors
- colored paper
- glue
- 4-5 pieces cardboard (optional)

PROCEDURE

Begin by writing the word "extrapolation" on the board. Ask if anyone has any idea what this word means. If not, explain that extrapolation is the process of analyzing (looking carefully at) things in the present and using them as a basis for guessing what the future will be like. For instance, if you plant a seed in the ground and then use what you know about that kind of plant and the weather in your area to guess when the plant will come up and what the grown plant will be like, that is extrapolation. If students look at themselves in a mirror and try to imagine what they will look like when they are grown up, that is extrapolation. Tell students that in this Activity they will have a chance to do some extrapolating about a modern Indian community and imagine how it will grow.

Have students refer back to the map of the Golden Valley in Activity 4 (page 51 of this book). Looking at that map, and assuming that more people come to Golden Valley to live, ask how they think the city will grow. Where will the new people be most likely to settle? Get students to notice, perhaps by comparing this map with the one in Activity 3, that population (indicated by the smaller lines which equal streets) seems to spread along main roads, cluster around intersections, fill in empty spots between populated areas, or simply expand at the edges. New communities or developments near a city are built near industrial centers or in particularly scenic spots, such as hills overlooking a city.

Now ask students which they think is better, just letting a community grow any way it happens to turn out, or *planning* for it to grow in a certain way. What kinds of problems might arise if a city is allowed to grow without any planning? How might planning avoid these problems? Ask students if they have ever known anyone who was a city planner, or if they know anything about how city planning works. If anyone does, ask him or her to explain what he or she knows about city planning. Explain that city planners spend a lot of time trying to anticipate development and control it, so that the needs of the new areas can be met without causing problems. Usually the planners do not have the chance to start from scratch with an entirely new community; but if they do, they try to design a community which will have everything it needs and be both convenient and attractive for the people who live there. Tell students that in this Activity they will have a chance to pretend to be city planners and to try their hands at designing a new community for the Valley People's reservation.

Exercise 1. Changing Times

Reproduce and distribute to students the reading and map on pp. 127-130. The passage describes briefly the further growth of Golden Valley and focuses on some events on the reservation, including the discovery of more oil and uranium on the reservation, and the settlement of a land claims case which finally gives the Valley People enough income to develop their lands themselves.

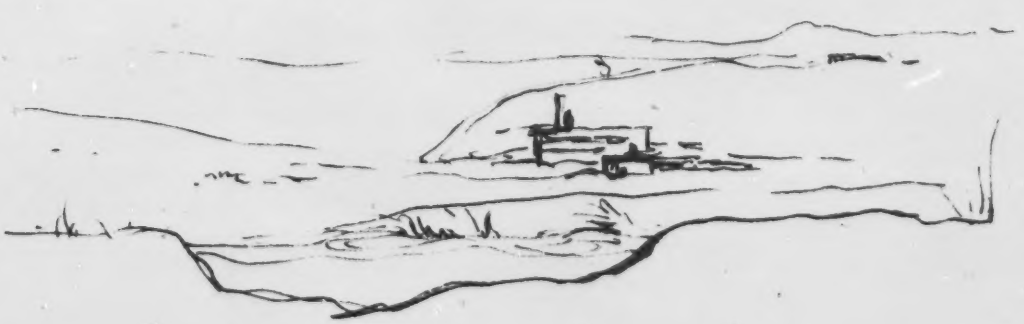
When students have finished the reading, they should study the map then have them answer the questions on p. 129 . Make sure students have paper for answering the questions. When students have finished writing their answers, you will probably want to collect the papers and correct them. Sample answers for these questions appear on pp. 131-132 of this Teacher's Guide. In addition to or instead of correcting the papers, discuss the answers in class. This will give students a chance to compare notes on how they expect Golden Valley to grow and what types of industry they think would be good for the reservation to develop.

GOLDEN VALLEY TODAY

Year by year, Golden Valley goes on growing. Now the children are growing up and making homes of their own. An aircraft company moves into the area, making many new jobs. A number of electronics companies are built, too. Lots of new people move to Golden Valley. Housing developments are built for them to live in.

By this time, there are three community colleges in the area. A national chain of grocery stores has started branches in several parts of the city, too. And there are six new banks. Schools, fire stations, and other services have also been added to. All of this has been very hard on the city's water and sanitation services. A new water treatment plant had to be built near the duck marsh on the north fork of the Dorada. A sewage treatment plant has been built downriver, just across the river from the Valley People's reservation.

Meanwhile, things are changing on the Reservation, too.



Another oil field has been discovered on the other side of New Village. And far back in the mountains, prospectors from the Research Labs have discovered a second deposit of uranium. Small settlements are growing up around the mines and oil fields. The tribe is earning quite a bit of money by leasing the mineral rights in these two areas. The tribal council has already used some of the money to start the Indian Springs resort area in the mountains near the uranium mines.

But the Valley People still have problems. Their population has been growing fast, and many of the tribe's young people are moving to the city because there is no work for them at home. The tribe has a lot of land, but most of it is too dry for farming. Several young men who have studied agriculture and engineering are looking into irrigation systems, but all the systems seem to take more money than anyone has.

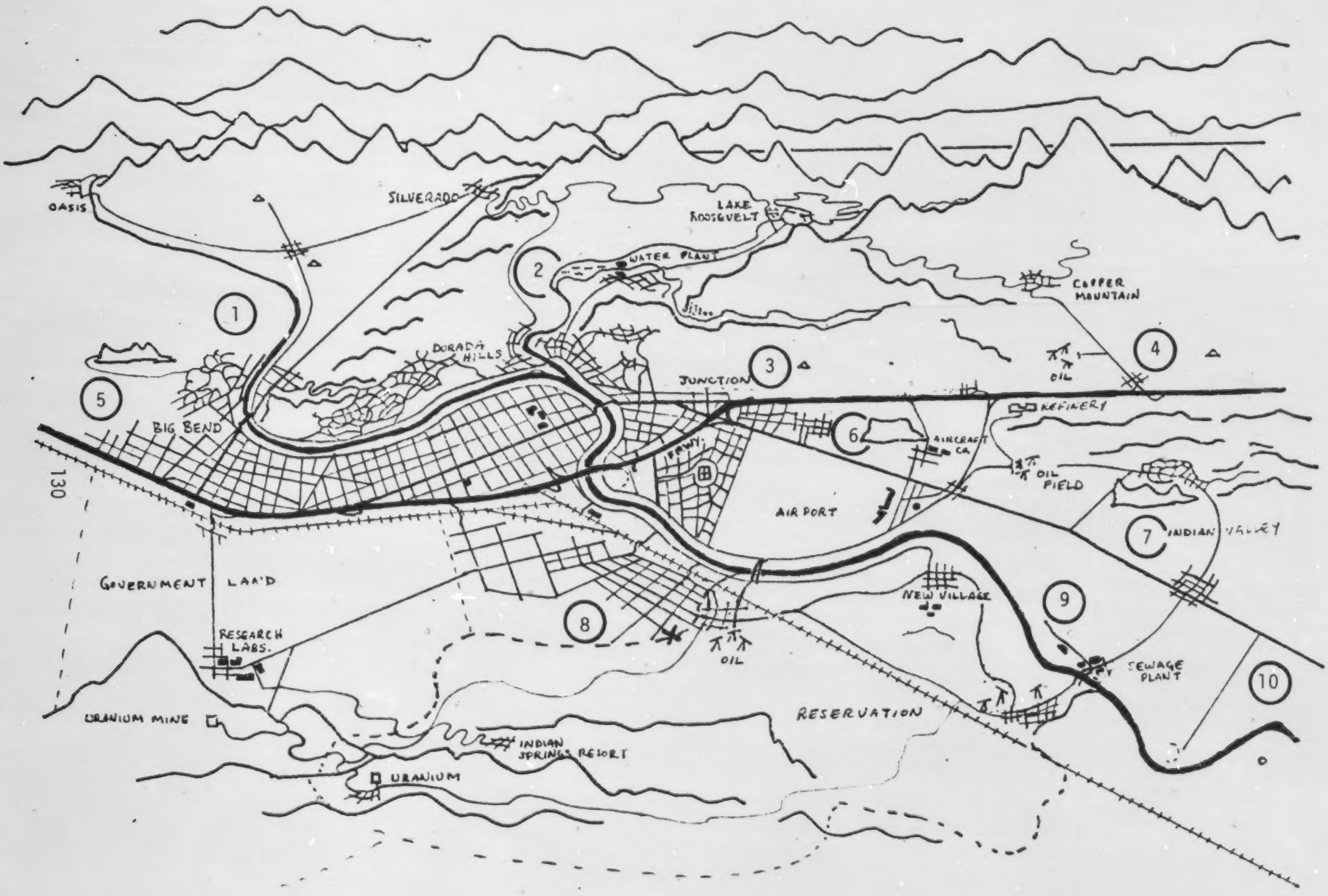
There is one hope, though. Many years before, there was a flood. During the flood the river shifted its course, so that land which was once on the Valley People's side of the river is now on the other side. The Indians knew that this land had been part of the land given to them, but they didn't know what to do about it.

Now the city has decided to build its new sewage treatment plant on this land. The story of the plant and the flood has been in the newspapers. Lenny Walker, one of the Valley People who had just finished law school, saw the story. He has realized that his tribe should either get this land back or be paid for it. Now that the city has spent money building on the land, it is worth a great deal. If the Indians can get this money, they will have enough to start some businesses on their own.

On the next page is a map showing how Golden Valley looks now. Look at it, review this reading, and then answer these questions:

1. Did Golden Valley grow the way you expected it to? The map on the next page has numbers on some of the blank areas. Write down the numbers of the three areas where you think Golden Valley is most likely to grow next. Then explain why you chose those three.

2. If the Valley People get their money, what are three types of industries they might want to develop on the reservation? Answer on the basis of what you know about the reservation, the people, and what other industries have succeeded in Golden Valley. (Note: "industry" means any kind of business or activity that makes jobs for people.) Discuss the good points and bad points of each industry you name.


OASIS
SILVERADO
LAKE ROOSEVELT
WATER PLANT
COPPER MOUNTAIN
DORADA HILLS
JUNCTION
OIL
REFINERY
BIG BEND
AIRCRAFT CO.
OIL FIELD
AIR PORT
INDIAN VALLEY
130
GOVERNMENT LAND
NEW VILLAGE
RESEARCH LABS.
OIL
SEWAGE PLANT
RESERVATION
URANIUM MINE
INDIAN SPRINGS RESORT
URANIUM
1
2
3
4
5
6
7
8
9
10

EXERCISE 1.

1. Did Golden Valley grow the way you expected it to? Write down the number of the three areas on the map where you think Golden Valley is most likely to grow next. Why did you choose these three?

The three most probably probable places for new growth are areas 3, 6 (because they adjoin already developed areas and are near the airport and aircraft company), and 2 (because it is a scenic area, on the road to a resort, and near an industry--the water treatment plant). Next in probability would be areas 1,5, and 7, mainly because of their closeness to existing areas and lack of disadvantages. Areas 8 and 9 are near unsightly industries--the railroad yards and the sewage plant. Areas 10 and 4 are just too far out of town.

Note: different answers may be acceptable if the reasons given for them are good enough.

2. If the Valley People get their money, what are three types of industries they might want to develop on the reservation? Discuss the advantages and disadvantages of each.

a. Farming--Agriculture is practiced elsewhere in the valley, and it was the traditional source of much of the Valley People's food. Irrigation would let the Indians use a lot more of their land for this purpose.

b. Ranching--This also has been done in the valley, and the nature of the work might appeal to the Valley People's men. There is some question as to whether the reservation would support enough cattle to make it worth while, however.

c. Oil refinery--With two oil deposits on the reservation, there would be plenty of raw material. However, there is already one refinery in the valley, and it may be too expensive to build a second refinery for the amount it would process.

d. Furniture company--Wood could be bought from the local lumber companies, and the Valley People who have a traditional skill in wood-working, would probably be good at it. One possibility would be to combine wood and basketry (for chair seats and backs, etc.). The only problem might be the cost of buying wood.

e. Resort development--One resort has already been started on the reservation, so it is certainly possible. However, development in this area should go slowly, because resorts can fail miserably if there are not enough guests to make them pay for themselves.

f. Clothing or cloth making--A possibility, and one in line with the Valley People's traditions, especially for women. However, most of the raw materials would have be brought in from outside.

g. Electronics or other light industry--Possible, although considerable training opportunities would have to be offered.

The above should give you an idea of the kinds of answers students might give. There are of course many other businesses that might succeed.

Exercise 2. Planning for Tomorrow

In this exercise, students in workgroups will have a chance to play the role of members of a planning commission whose job is to design a modern community which reflects traditional values of the Valley People.

Before you begin this exercise, prepare the materials for it. They are as follows:

1. *Site Map*. The four masters which make up the map appear on pages 135-138 of this Teacher's Guide. Reproduce one set of these for each workgroup. Students will need tape to put the map together. You may also wish to provide them with cardboard to paste the map onto. The maps will *not* be re-usable.

2. *Reservation Map*. The master for this map appears on page 139 of this Teacher's Guide. Reproduce one map for each workgroup. If you wish, you may provide cardboard and paste for backing this map also.

3. *Templates*. Each workgroup will need two or three templates with useful shapes for drawing buildings. Masters for these are on page 140 of this Teacher's Guide. Reproduce one set for each workgroup. For these you should definitely give the students cardboard, stiff paper, etc., for backing. Students will also need paste or glue, and scissors to cut out the shapes.

4. *Other Materials*. You should provide pencils and erasers, and crayons, colored pencils or paints for each workgroup. You should also provide colored paper, in case students want to cut out building silhouettes and paste them on the site map rather than drawing them on it.

In introducing the exercise, explain that when new industries develop, communities grow around them to serve the people who work there. Students have already learned something about how this happens in the preceding Activities. Remind students that there are two ways for a community to grow--by chance or according to a plan. If you can, give local examples of obviously unplanned housing and business location. Of course, a planned community is only an improvement if the planners understand the needs of the people they are building for. For example, what might a community for families with young children need that a community for adults only would not?

Explain that in many reservations across the country, federal or state agencies or private industry are sponsoring economic development (oil, coal, resort, agriculture, light industry, etc.). Many reservations have established Industrial Parks--areas specifically set aside for industry and provided with power--to which they hope to attract companies. Where are the workers in the industries going to live? (If possible, have a copy of Indian Industrial Parks* for students to look at).

---

*Available from: Indian Industrial Development Office
Economic Development Administration
U. S. Department of Commerce, Washington, D. C. 20230

When you are ready to have students begin this exercise, reproduce and hand out the materials on pp. 141-149 of this book. After they have read the passage, hand out the rest of the materials for this exercise (pp. 135-140). Have students tape the map together, make the templates, and so on.

When the materials are ready to work with, have students read the passage on pp. 141-143 and look at the chart on p. 144. They should decide who will play what role on the "planning commission," and give you a list of students and the roles they will play. You, the teacher, will play the role of "technical consultant" for all groups. Use your knowledge of students' capabilities to suggest choices of roles to students if they seem to be having trouble.

This activity can be very meaningful for students, particularly those who have had some background in this area. The exercise encourages the student to think independently. You may wish to have less motivated students, or those who need more structure to learn, do alternative activities such as serving as assistants to "committee members",doing research for them, etc.

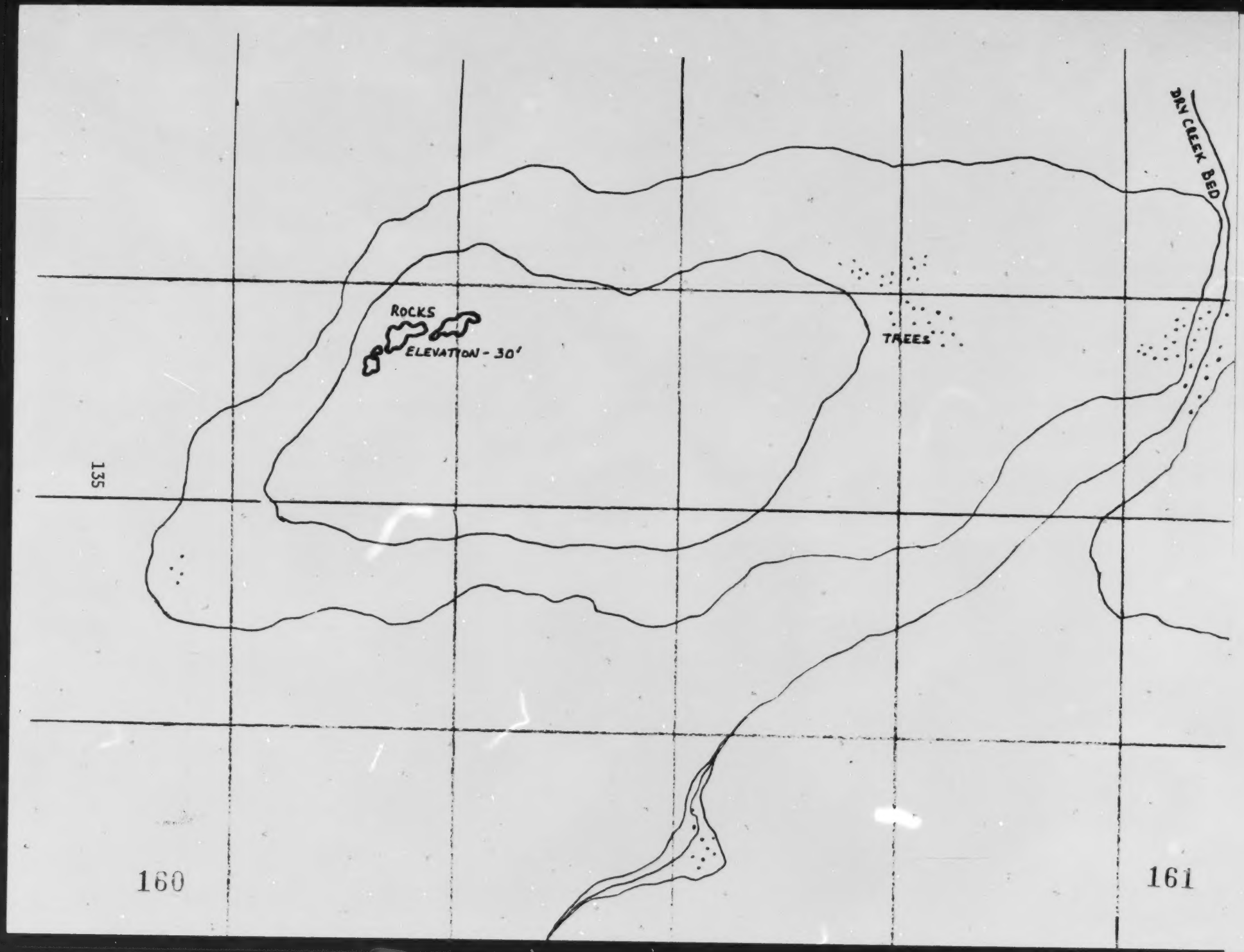
You will have several identical committees working, depending on the number of students in your classroom. Have each "committee" choose a site for its community. They should follow the directions and considerations to keep in mind listed on p. 143-149. The committee chairman will have the responsibility of writing down and handing in the group's reasons for its choice of site.

Pages 150-152 contain an excerpt from a report which was presented to the HUD Communities Program to get support for a planned community on the Navajo Reservation. It presents a number of important points to consider in planning a community. Read this excerpt to the class, or reproduce and give it to students to read. If necessary, it may be assigned as homework. It should be completed before students make their final decisions on the design of their community.

Now students actually begin work with the site map and templates to design their community. Each committee member is instructed to make a list of the things in his or her area which must be included. Circulate among students as they do this, making discrete suggestions if there are any obvious lacks (for instance, if the Utilities Advisor forgets to put down a sewage system). You should also make sure that the Housing Advisor is considering whether separate single-family houses, duplexes, apartments, etc.would be more appropriate. The instructions direct the committees to call you in, as technical consultant, just before they make their community map permanent. You should note and tactfully correct any glaring problems at this time.

After the community map has been completed, each member of the group should write a report about his or her part of the community design. This may also be done as homework, although students should be given class time to consult with other group members, help each other with arithmetic or composition problems, etc. Instructions for the reports are on pages 147-149.

If feasible, a display may be put up which will include all the groups' community maps (including the reservation maps with the site indicated) and reports.

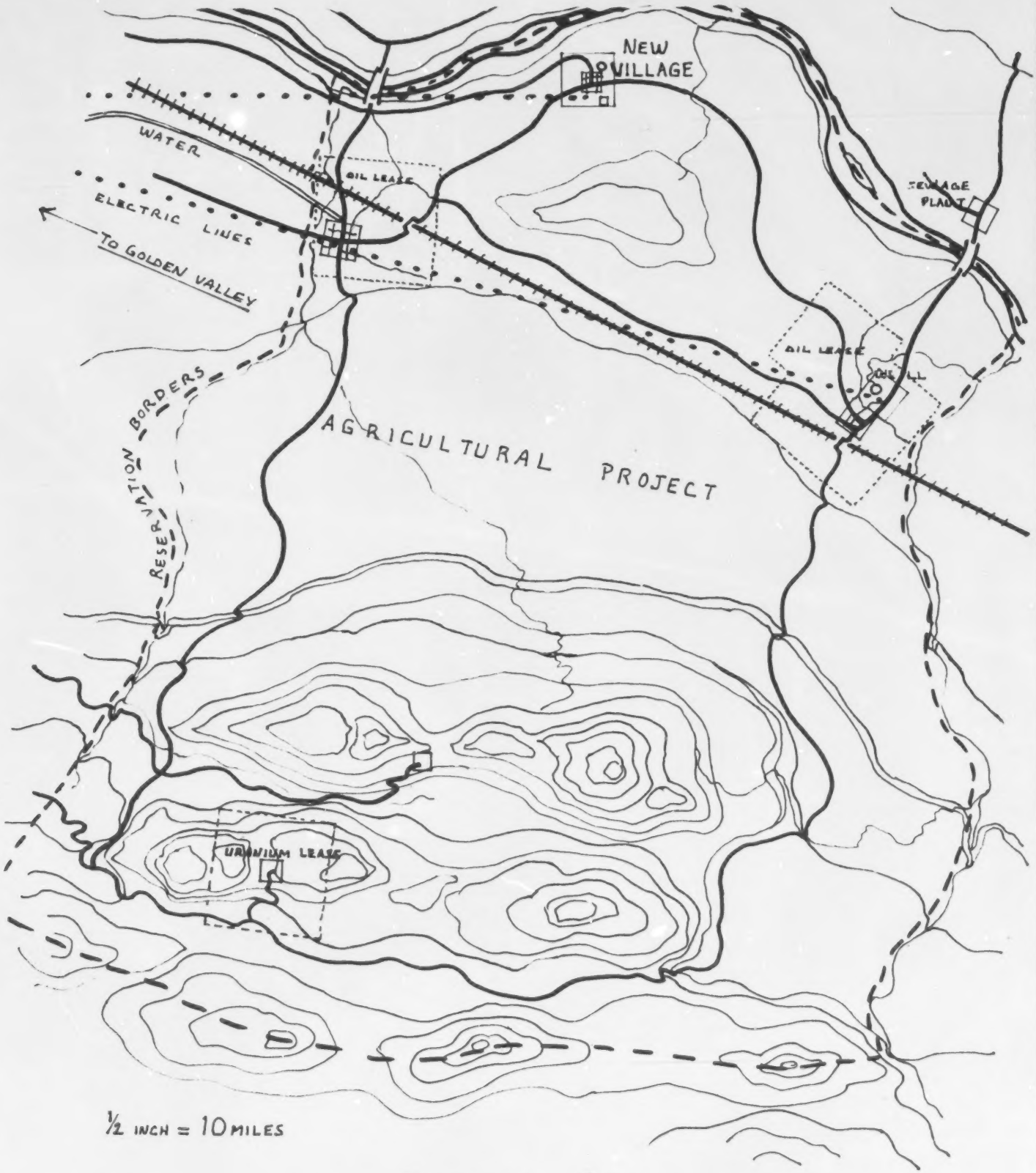

DRY CREEK BED
ROCKS
ELEVATION - 30'
TREES
135
160
161

136
162
163

SITE MAP for the New Community

½" = 200' EACH 2" square = 6,400 SQ. FT.

ELEV. - 5'
138
166
167

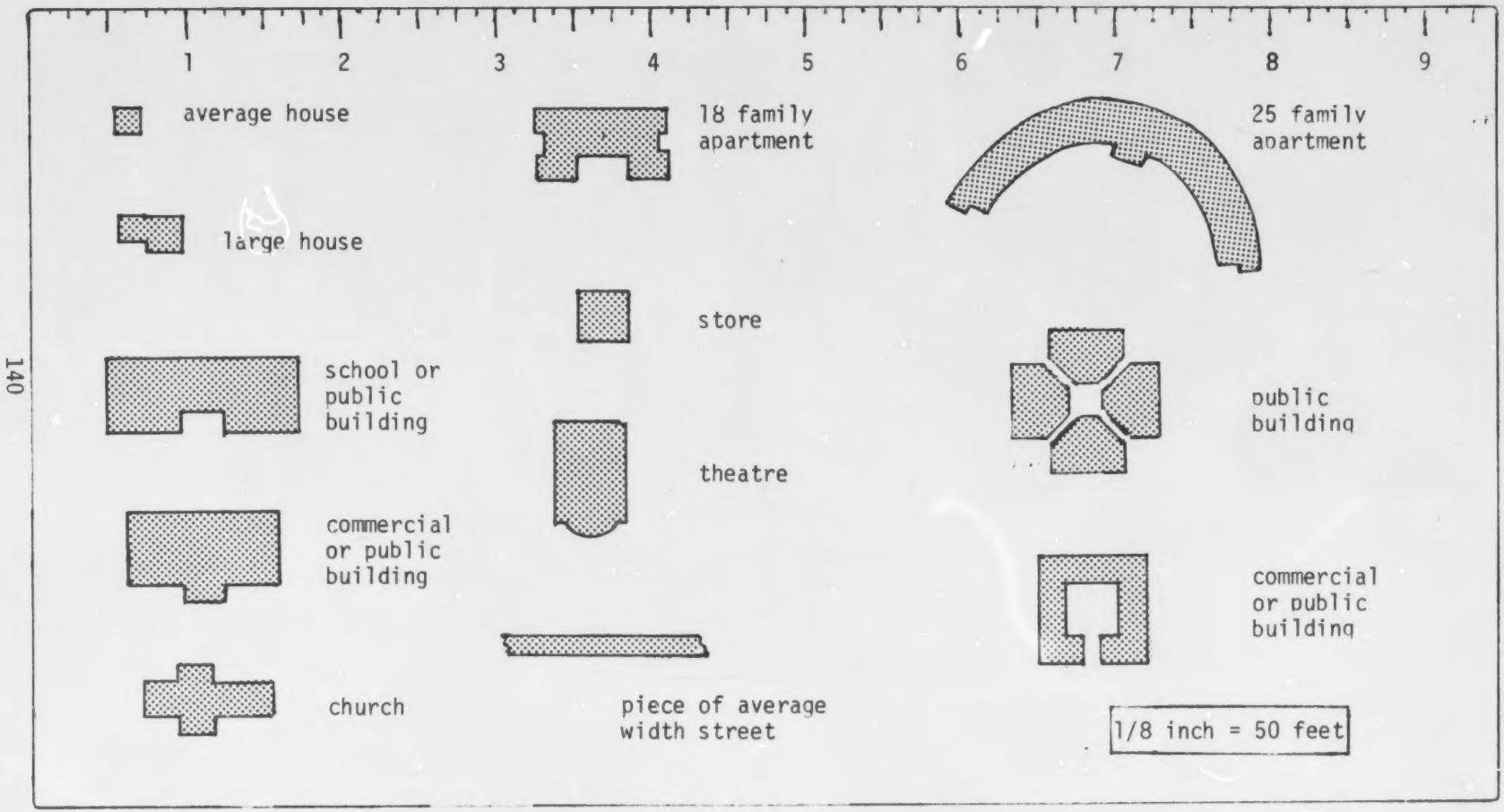


Reservation Map

139

PATTERN FOR TEMPLATE

(cut out shaded areas)



EXERCISE 2. PLANNING FOR TOMORROW

Hooray! The land claims case has been settled, and the Valley People are going to get a lot of money. The tribal council has decided that the money should be held in trust to do something for the whole tribe rather than being divided up among all the members. After a great deal of discussion, and advice from several economic experts, the tribe has decided to develop an irrigation project. This will be especially easy, because the land claims settlement gave the tribe the right to make special arrangements with the city for use of water purified by the sewage treatment plant.

The tribe plans to use the land shown on the map below to grow cotton and soybeans. The irrigation methods to be used will work best if the land is not broken up into separate plots. Instead, there will be one giant "farm" which will be owned by the whole tribe. Tribal members will work on it. The tribe also plans to develop feedlots for cattle. This should work well because the railroad goes through the reservation. Cattle and meat can easily be shipped from there.

Now the tribe has to think about where the people who work on this farm are going to live. New Village is really too far away from the farm for people to go to and from there to work. Besides, it is not nearly big enough for all the people who will probably come. It is likely that many Valley People who have moved to the city will move back again to work on the farm, and there must be room for them. There must also be room for the extra people who will come to work during the harvest time.

The council decides that a completely new community for 250 families should be designed. It should have room for 100 more families, too.

What will the new community be like?

In this exercise you will pretend to be members of a special committee. The tribal council has appointed this committee to plan the new community. To find out just what you should do, turn the page.

PLANNING THE NEW COMMUNITY

INSTRUCTIONS

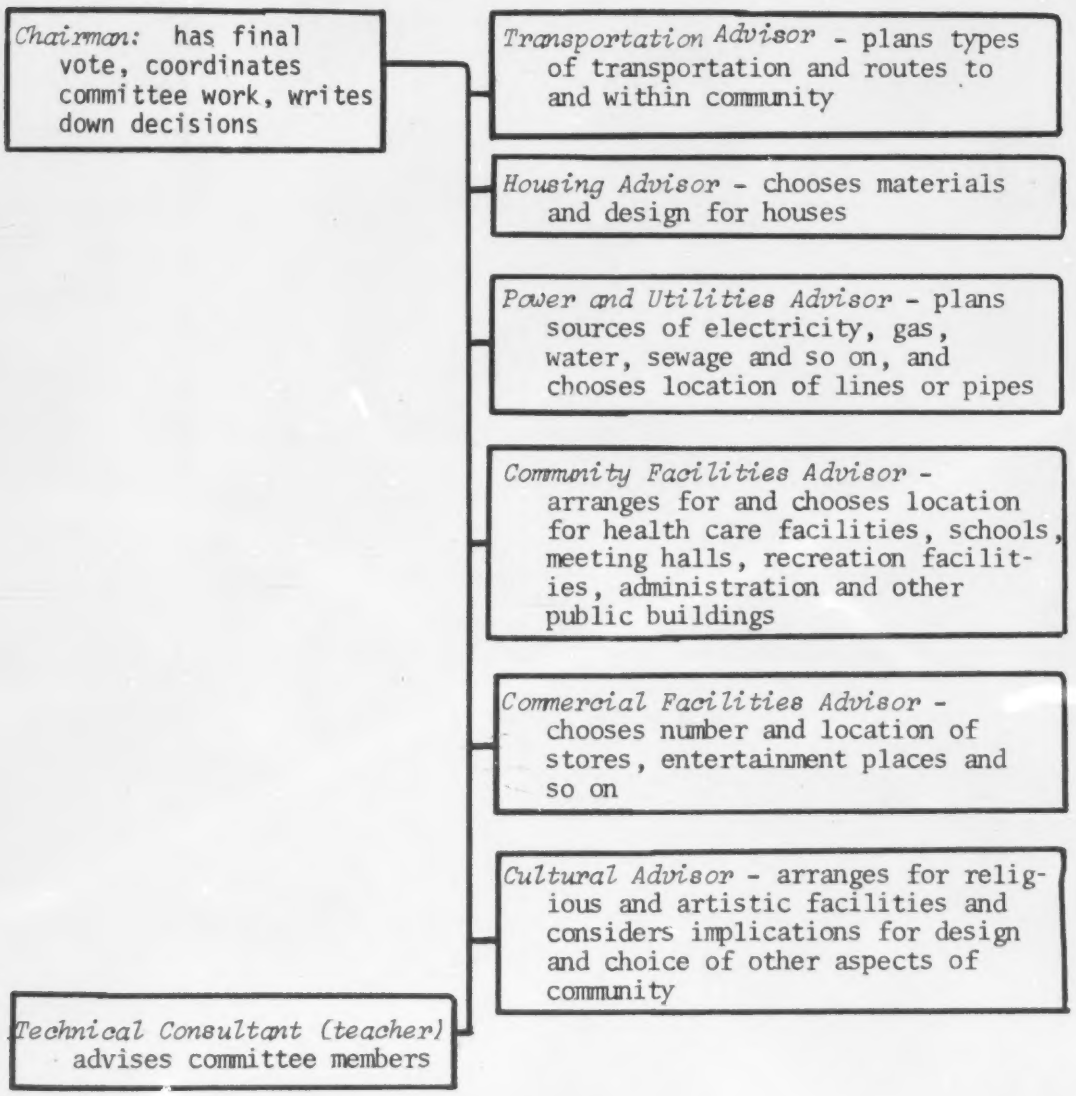
1. Your teacher will pass out a worksheet with a map of the reservation; four pieces of paper which must be taped together to form a map of the building site; a *template* (pattern through which shapes can be traced) to use in outlining buildings; pencils, scissors, paste, and so on. Your first job is to put the map together.

2. Now, look at the chart on the next page. It shows the jobs of the different committee members. Each committee member is in charge of meeting one part of the community's needs. Each student in your work group should choose one need area to be in charge of. Your teacher will be the technical consultant. He or she can be called in for advice if necessary.

3. When you have decided who will be in charge of what, write down the names and areas chosen for each member of your workgroup. Give the list to your teacher. You must consult with your teacher if you wish to change in the middle of the exercise.

THE COMMUNITY PLANNING COMMITTEE

(Note: If you have less than seven group members, combine some of these jobs. If you have more than seven group members, split some of them up).


Chairman: has final vote, coordinates committee work, writes down decisions
Transportation Advisor - plans types of transportation and routes to and within community
Housing Advisor - chooses materials and design for houses
Power and Utilities Advisor - plans sources of electricity, gas, water, sewage and so on, and chooses location of lines or pipes
Community Facilities Advisor - arranges for and chooses location for health care facilities, schools, meeting halls, recreation facilities, administration and other public buildings
Commercial Facilities Advisor - chooses number and location of stores, entertainment places and so on
Cultural Advisor - arranges for religious and artistic facilities and considers implications for design and choice of other aspects of community
Technical Consultant (teacher) advises committee members

4. Your "committee" should now look at the map of the reservation and decide where you will put your community. Things to think about in deciding this include:

a. Where will electricity, gas, water, sewage lines, and so on come from? (Lines and pipies cost money, remember.)

b. What new roads will have to be built? (Road building is expensive, too.)

c. Is this the best use for this particular piece of land?

d. Is there room for the community to grow larger?

e. Is this a pleasant, attractive site? (Is there a view? Is it near any ugly industries?)

f. How far will people have to go to reach the farm area, and how easy will the trip be? (For instance, would people have to go up or down steep hills?)

When you have discussed all these things, put an "X" in pencil on the map at the place where you want to build your community. Remember that no one site will be ideal from the point of view of all the things listed above. It is up to you, as committee members, to decide which things are most important. Let those things determine your choice.

Your group's chairman should now write down a short description of the reasons why you chose the site you did.

5. Now you are ready to begin planning your community. The site map which you have put together shows an area which is fairly typical of the Valley People's reservation. Note that the ground is not entirely level. The irregularities will either have to be avoided, filled in, or worked into the community's design.

On both the site map and the template, ½ inch = about 50 feet.

Each member of the committee should begin by making up a list of the things in his or her area which should be in the community. (For instance, the Commercial Advisor should decide how many stores will be needed, whether they should be small neighborhood groceries or supermarkets and so on.)

When you are done, tell the other group members what you need. Listen while other group members do the same. Then when everyone is finished, the Transportation Advisor should begin to lay out streets, open areas and so on on the community map. The others should find positions for their buildings. If building shapes are cut out of paper, they can be moved around until the best position is found. Or they can be drawn in pencil and re-drawn if necessary. Remember that

☐ = one family unit,

and you will have to find room for 250 to 350 families.

Try to choose materials and arrangement of houses and other facilities that will reflect what you know about the tribe's culture. The ideal is a community that will be distinctively Indian, and modern as well.

When you have agreed on a design, call in your technical consultant for comment. Then glue down or ink in the shapes for your final design. The site map with your community can be decorated any way you want.

6. When your group has finished its design, each committee member should write a report. Your report should include a description of the parts of the community you designed and your explanation of why you designed them that way. Special instructions for particular committee members are listed below.

a. Committee Chairman

In your report, you should talk about whether or not you think this community will be easy to govern, and why. Your answer might be based on whether or not the people are likely to be happy, whether the administration building, police station, fire stations, and and so on are easy to get to and other such things.

b. Transportation Advisor

First, describe the transportation system you worked out. Then take a ruler and measure the length of all the roads within your community. If there are curves, take a piece of string, lay it along the roads, and measure that. (Remember, ½ inch equeals 100 feet, and 5,280 feet equals one mile.) Now take the reservation map, and using the X with which your group marked its site as a starting point, measure to the triangle in the middle of the farm area. (On this map, ½ inch equals ten miles.) Now add up all your totals. This will tell

you the number of miles of new road that will have to be built. When you have finished, ask another member of your group to check your arithmetic. How do you think Jim Bowman's Trucking company will fit into your system?

c. Housing Advisor

In your report, describe what materials will be used in your buildings. Will they be brick, concrete, wood, or what? Then tell where the builders will get the materials. Which ones can be gotten nearby? Where will they be gotten? Which ones have to be brought in? From how far away must they be brought?

d. Power and Utilities Advisor

First, describe your utilities system. Then take a ruler and measure the length of all electric lines, water pipes, and sewage pipes between buildings and to the edge of town. (Remember, ½ inch = 100 feet, and 5,280 feet = 1 mile.) Now take the reservation map, and measure the distance from the X that marks your community to the nearest sources of electricity, water, and sewage treatment that are there now. (Remember, ½ inch = ten miles on this map.) When you are finished, figure out the total amount of electric wires, water pipes, and sewage pipes that you will need. Have another group member check your arithmetic.

e. Community Facilities Advisor

Be sure your report includes a description of who will use each public facility you included in your design. Also tell how often each facility will be used, and for what.

f. Commercial Facilities Advisor

Be sure your report includes the nature and number of each kind of store. Have you made sure every need is covered? If a need is not covered in the community, where will community members go to meet it?

g. Cultural Advisor

Your report should explain the cultural fitness of everything in the design. If you thing something in the design is not very typical of Valley People's culture, explain why it had to be done that way.

THE NEW COMMUNITY ON THE NAVAJO RESERVATION

by Phil Reno

Some new work projects are about to be started on the Navajo reservation. This means that more people will be going there to live. As more people arrive, more housing and community services will be needed. The area will grow.

It can grow in one of two ways. One way is simply for new housing to "sprawl" around the edges of cities that are already there, or for shacks to spring up around the area of the work projects. This kind of growth can make things hard for everybody. It can create such problems as long traveling time between home and work, air pollution, poor housing for many, overcrowding of businesses already in operation, and poor chances for Navajo people to start new businesses.

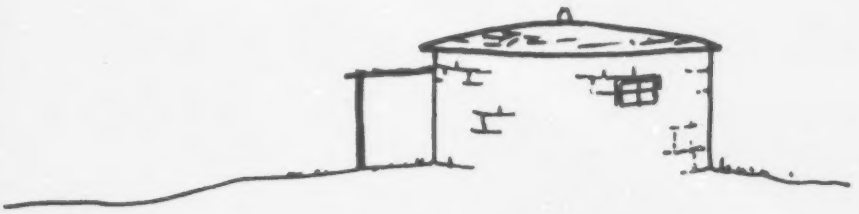
On the other hand, the area can grow by means of a well-planned, wholly new community. This is what we propose to set up. This new community will be special in many ways. It will be set up so that it will not have to depend upon any of the nearby cities for anything important. The people in the community will have everything they need.

Since the work projects will be part of the new community, the people will not have to go to the cities to find jobs. They will

be able to work with their friends and neighbors in their own community.

Although there will be many different kinds of people in the community, most of the people there will be Navajo. Therefore, the Navajo culture, Navajo history, and Navajo religion will determine how the community looks, how it is run, and how it should grow. Navajo names and symbols will be used throughout the community as much as possible, and Navajo people will plan and manage the community. We hope that tne new community will be the model for many others.

There will be many different kinds of housing in the community. The houses will be built well so that the people will want to own them rather than rent them from someone else. This is one thing that will help keep the community strong.



The businesses and services in the community will be run by Navajo people so that, when people buy things or pay for services, their money will not be leaving the Navajo community. This is another thing that will help keep the community strong. We might even start a Navajo Housing Development Corporation to make houses for the community, and possibly, elsewhere.

Everything will be done to make the community an enjoyable place to live. There will be many places where people can go to have a good time. There will be rodeo grounds, basketball courts, riding stables, arts and crafts fairs, and other such things.

There will also be a new school system. These schools will not only teach children. They will also teach adults how to make the best use of the new community and will train people for the jobs they want. Some Navajo community colleges will also be started.

Exercise 3. Review

Instead of answering standard review questions, in this exercise students are asked to write an evaluation of the community design and reports done by one of the other groups. For this purpose, it will be necessary to make all the designs available either by displaying them on the wall or by setting them up in a special area of the room. (The number of the workgroup, but not the name of the author should be put on the reports). Number the designs for convenience in reference, and try to avoid having students from the same workgroup critique the same design. (i.e., if there are 6 students in workgroup 1, and there are a total of 7 workgroups, student A might critique the design of group 2, B-3, C-4, D-5, E-6, etc.

Evaluation guidelines are provided on page 154. You may need to work with students to make sure they understand how to go about evaluating. There are no sample answers for this exercise; judge it by comparing with your own assessment of each design.

Additional Activities

If time and resources allow, if would add greatly to the impact of the unit to do one or more of the following:

1. Invite an architect, city planner, engineer, or other appropriate professional to speak to the class on considerations involved in community development.
2. Take class on a field trip to a housing or community development. Ask contractor, developer, engineer etc. where fire, police, power, water, sanitation service, etc. will come from. Find out where residents will go for food, entertainment, education, health care, etc.
3. Have representatives from workgroups meet to prepare a joint plan for the Valley People's community, using the best elements from each workgroup's design, and as a class project prepare a model of the new community.
4. If class includes students from many tribes, have individuals write to tribal headquarters and prepare reports on economic developments on their own reservations.
5. If school is on or near a reservation, have students find out if any economic developments are planned or in progress, or analyze reservation resources and suggest one or more industries that might be started (with suitable help and funding), and then plan a community to go with it, using the skills developed in this unit.

Additional Resources

Additional resources for this unit are listed and described on page 166 of this Teacher's Guide.

EXERCISE 3. REVIEW

Instead of answering a series of questions, in this exercise your task will be to write an evaluation of the community design produced by one of the other workgroups. Be sure that you point out the good things about the design as well as the things you think could be improved.

Points to think about include:

1. Does the design let a community member meet all his or her her basic needs?
2. Will it be easy or hard to meet these needs? Why?
3. Does the design fit the culture of the Valley People? What things about it are especially appropriate or inappropriate, and why?
4. Does the design allow the community to grow?

Using The Test

The test questions on the next four pages are intended to check student mastery of the main points covered in this unit. If your presentation of this material has varied to any significant degree from what is in this book, you may want to add or replace questions on the test.

In addition to serving as a measure of student achievement, having students answer these questions can serve as a useful review activity.

Sample answers appear on pp. 161-165.

Name _____

Date _____

QUESTIONS FOR STUDENTS WHO HAVE FINISHED "THE COMMUNITY IN TRANSITION"

1. Draw lines between the words listed below and the phrases which say what they mean. One pair is already connected as an example.

Example: *Nomad* °	° passing from one condition, form, stage, activity, etc. to another; the time during which this happens; change or development
a. *Environment* °	° something than can be used or drawn upon to fill a need
b. *Culture* °	a member of a tribe, nation or race that has no permanent home, but moves around looking for food, pasture, etc., or simply someone who changes homes often--a wanderer
c. *Resource* °	° all the conditions, circumstances, influences, etc. surrounding and affecting a person or animal, such as weather, the land, other people, etc.
d. *Transition* °	° the ideas, habits, skills, arts, tools, social systems, etc. of a people in a certain time and place; a people's ways or traditions.

2. Complete these sentences:

If a group of people did not have enough food for everyone,

a. they might give what food they had to the hunters first

because _____

_____.

b. they might give what food they had to the children first

because _____

_____.

(Complete both a. and b.)

3. Suppose a group of people who lived in a warm valley with good land had to move into cold mountains. Describe or draw pictures of how they met one of their needs (food, clothes, etc.) in the valley. Then describe or draw how they might change the way they met that need when they moved to the mountains.

   a. the valley

   b. the mountains

4. People often change their way of life when they get new resources, new tools, or learn new skills. Name or draw pictures of two new things that changed the way of life of some Indian group when they started to use them, and tell how the way of life changed.

New Thing	Change Caused
(example) weaving	change from using skins for clothes to making clothes from cloth
a.	
b.	

5. Four pairs of actions are listed below. What is the same about the two parts of each pair? What is different?

a. going hunting/going to the store:

same _____

_____

different _____

_____

b. being a policeman/being a warrior:

same _____

_____

different _____

_____

c. gathering firewood/turning on the stove:

same _____

_____

different _____

_____

d. going to the doctor/drinking grandma's herb tea:

same _____

_____

different _____

_____

6. Which of the things below must a small town have (or be able to get) to grow into a big city? (Put check marks beside the right ones).

_____a. good weather	_____d. transportation
_____b. materials to build houses	_____e. many rich people
_____c. a way to get water	_____f. a product to sell

7. What are two good things about living in a city?

a.

b.

What are two bad things about living in a city?

c.

d.

8. Here is a list of businesses or industries. Write the names of the ones you think would be best to start in each of the places described below.

cattle ranch; logging industry; large irrigated farm; motel and resort; factory to make pottery plates, cups, etc.; factory to make parts for machines.

a. A village on a reservation in the desert near a large city. There is good clay in a dry riverbed there. Both men and women of the tribe are good at making things.

_____

b. A reservation in the middle of beautiful forested mountains.

_____

c. A reservation on the grassy plains. The women of the tribe are known for their crafts.

_____

9. Describe two ways in which planning a city be ore building it might make it a nicer place to live.

a.

b.

10. Draw lines between the descriptions of ways certain tribes used to live, and the kinds of modern homes you think they would like.

They used to live in	Modern homes they would like
a. in family groups far apart from each other	° hotels
b. in villages with houses built on top of each other	° two- or three-family-houses in a town
c. in large family groups in a village	° single houses surrounded by their own land
	° big apartment houses

Sample Answers

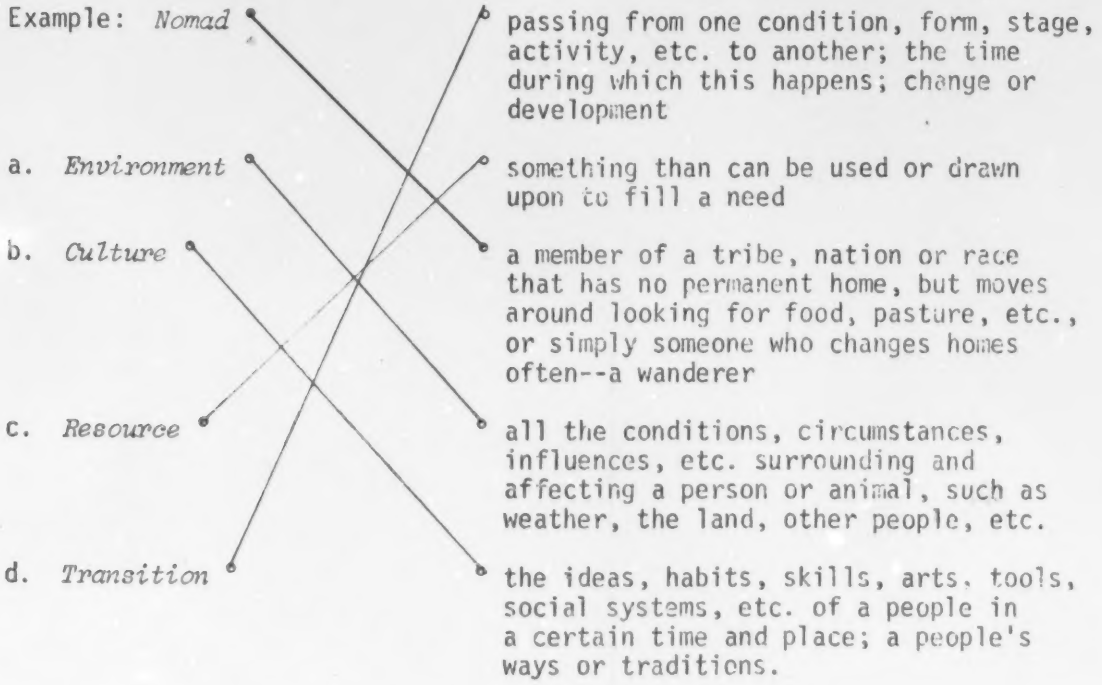
=possible 40 points=

Name _____

Date _____

QUESTIONS FOR STUDENTS WHO HAVE FINISHED "THE COMMUNITY IN TRANSITION"

4 pts. 1. Draw lines between the words listed below and the phrases which say what they mean. One pair is already connected as an example.


Example: Nomad
a. Environment
b. Culture
c. Resource
d. Transition
passing from one condition, form, stage, activity, etc. to another; the time during which this happens; change or development
something than can be used or drawn upon to fill a need
a member of a tribe, nation or race that has no permanent home, but moves around looking for food, pasture, etc., or simply someone who changes homes often--a wanderer
all the conditions, circumstances, influences, etc. surrounding and affecting a person or animal, such as weather, the land, other people, etc.
the ideas, habits, skills, arts, tools, social systems, etc. of a people in a certain time and place; a people's ways or traditions.

2pts. 2. Complete these sentences:

If a group of people did not have enough food for everyone,

a. they might give what food they had to the hunters first

because *the hunters needed strength to go after more food for the rest of the tribe, to defend them, etc.*

b. they might give what food they had to the children first

because *the children were weaker and could not go without for as long, also, the children were the tribe's hope of survival*

(Complete both a. and b.)

2 pts. 3. Suppose a group of people who lived in a warm valley with good land had to move into cold mountains. Describe or draw pictures of how they met one of their needs (food, clothes, etc.) in the valley. Then describe or draw how they might change the way they met that need when they moved to the mountains.

a. the valley

Possibilities include: hunting or gathering food that grows in valleys, growing corn, etc.; wearing little clothing, lightweight clothing etc.; building houses which would be cool; using a travois, wagon, etc.

Any other example which is appropriate to Valley people should be given credit.

b. the mountains

Possibilities include: hunting or gathering food that grows in the mountains instead of farming; wearing furs and heavy clothing; building warm houses; using pack-animals, etc.

Any other example which matches the one given in "a" and is appropriate for mountain people should be given credit.

4 pts. 4. People often change their way of life when they get new resources, new tools, or learn new skills. Name or draw pictures of two new things that changed the way of life of some Indian group when they started to use them, and tell how the way of life changed.

New Thing	Change Caused
(example) weaving	change from using skins for clothes to making clothes from cloth
Possible answers include:	
a. *horses*	*change from walking to riding, hunting on horseback, travelling a lot, etc.*
b. *guns*	*change from using bows and arrows, more efficient hunting, fighting, etc.*
corn growing	*change from hunting and gathering to living in one place and growing food*

Any item introduced by Europeans or by one Indian group to another can be used if the change caused is described.

8 pts.

5. Four pairs of actions are listed below. What is the same about the two parts of each pair? What is different?

a. going hunting/going to the store:

same *both are ways of meeting the need for food*

different *in hunting, you have to catch and kill the animal yourself, as well as prepare it for cooking. In a store, you simply buy the meat all ready to cook.*

b. being a policeman/being a warrior:

same *both are ways of meeting a community's need for security-defense.*

different *all men were supposed to be warriors if necessary, but only a few people in a community are policemen. Also, policemen are supposed to make people obey laws as well as defending against criminals.*

c. gathering firewood/turning on the stove:

same *both are ways of meeting the need for fuel (heat, for warmth, cooking).*

different *you have to find and prepare the firewood yourself. Turning on the stove brings you electric heat or heat from fossil fuels with no further effort.*

d. going to the doctor/drinking grandma's herb tea:

same *both are ways of meeting the need for health care (security).*

different *the doctor goes to school to study medicine, and specializes in being a doctor. Grandma probably got her recipe for herb tea from her mother, or worked it out herself. She helps cure people in addition to her other activities.*

4 pts. 6. Which of the things below must a small town have (or be able to get) to grow into a big city? (Put check marks beside the right ones).

____ a. good weather	✓ d. transportation
✓ b. materials to build houses	____ e. many rich people
✓ c. a way to get water	✓ f. a product to sell

4 pts. 7. What are two good things about living in a city?

any of these:

a. *many sources of food, clothing, tools, entertainment, health care, etc.*

b. *lots of other people around to do things with, good transportation, schools, etc.*

What are two bad things about living in a city?

c. *traffic, pollution, crowds, noise, crime, etc.*

d. *not enough plants, animals, etc.*

3 pts. 8. Here is a list of businesses or industries. Write the names of the ones you think would be best to start in each of the places described below.

cattle ranch; logging industry; large irrigated farm; motel and resort; factory to make pottery plates, cups, etc.; factory to make parts for machines.

any of these:

a. A village on a reservation in the desert near a large city. There is good clay in a dry riverbed there. Both men and women of the tribe are good at making things.

pottery factory, irrigated farm, machine part factory

b. A reservation in the middle of beautiful forested mountains.

logging industry, motel and resort, machine part factory

c. A reservation on the grassy plains. The women of the tribe are known for their crafts.

cattle ranch, motel and resort, pottery factory, machine part factory

2 pts. 9. Describe two ways in which planning a city before building it might make it a nicer place to live.

a. *Planners could be sure and leave room for parks, wide streets, etc.*

any of these:

b. *Plan to put stores, schools, etc. in convenient places, plan transportation system, put sewage and power systems out of sight, etc.*

3 pts. 10. Draw lines between the descriptions of ways certain tribes used to live, and the kinds of modern homes you think they would like.

They used to live in	Modern homes they would like
a. in family groups far apart from each other	hotels
b. in villages with houses built on top of each other	two- or three-family-houses in a town
c. in large family groups in a village	single houses surrounded by their own land
	big apartment houses

ADDITIONAL RESOURCES

Materials are listed by Activity. Distributors names are abbreviated--see p. 190 for full information where to order.

Activity 1: The Wanderers

Time of Man

col 50 min rent $27

Surveys animal species and several "primitive" human cultures that have survived or perished according to their ability to adapt to their environment. Suggests that all people are slowly moving toward a monolithic technological culture that views nature as an enemy.

Distributor: EMC #8643

First Americans

col 53 min rent $29

Traces the migrations of early people, the ancestors of the great Indian nations of the Americas--who crossed the Bering land bridge from Siberia and peopled the Western Hemisphere. Focuses on key archaelogical sites (in Siberia, Alaska, the Southwest, Venezuela, Peru, and Chile). Notes that similarities in toolmaking led anthropologists to hypothesize the relationship between the prehistoric Central Asians and those who were to become Native Americans and Eskimos.

Distributor: EMC #8567

Activity 2: The Villagers

Stone Age Americans

col 21 min rent $17

Visits the cliff dwellings of Indians who lived in Soda Canyon in the Mesa Verde, Colorado. Briefly traces the 13 centuries of their development before drought ended it in 1276. Visits Cliff House, where 400 lived, and Balcony House. Shows how these farmer people constructed their dwellings. The 1,600-year-old-mummy of a Stone-Age girl, a member of the Basketweavers, is seen. Informative and at times speculative commentary is by a Caucasian couple who guide the audience through the ruins and show various artifacts. For upper elementary and junior high school levels.

Distributor: EMC #7876

Sticks and Stones Will Build a House

col 30 min rent $20

Traces development of American Indian architecture in southwest U.S., from crude pit-houses to use of masonary construction and finally to the great Pueblo period, when sophisticated apartment complexes housing up to 2,000 people were built. Also shows rare footage of attempts to explore ruins in the '20's.

Distributor: EMC #8363

Indian Life in North America

Available to schools in Navajo and Apache Counties, Arizona on loan from Apache-Navajo Career Education Resources

Four filmstrips and cassettes on the Havasupai of the Grand Canyon (Parts I & II) and the Pueblo Indians of the Southwest (Parts I & II)

Indians of California, Part I (Village Life)

15 min col rent $12

Story of the California Indians as they lived in the days before the White man came to the Pacific Coast. Records the customs and traditions of a disappearing culture.

Distributor: EMC #2991

Indians of California, Part II (Food)

14 min col rent $12

Beginning with shaping arrowheads and stalking deer, shows how food is gathered, cooked, and eaten by California Indians. Fireside stories become a way of passing history and customs from generation to generation.

Distributor: EMC #5505

Tribe of the Turquoise Waters

13 min col rent $10

Records a visit by pack train to the valley of the Havasupais, deep in the Grand Canyon of the Colorado. Lured by fertile soil and abundant water, this agricultural tribe has lived here for centuries. We see aspects of their daily life.

Distributor: EMC #6681

Warriors at Peace

12 min col rent $10

Contrasts the peaceful modern life of the Apache with their warlike past. Their homes hug close to the streams, with modern cottages standing beside the wickiup of earlier times, and their reservation is one of Arizona's finest cattle ranches. Also shows the ancient rituals of the polien-blessing ceremony and the devil dancers.

Distributor: EMC #6682

Desert People

25 min col cost not given

Tells the story of the Papago Indians who have lived on the desert for centuries. Relates how they chose to live on the desert because they liked it, how to them it is not forbidding wasteland and how they find uses for every growing thing. Shows how they manage to farm a little land and raise cattle.

Distributor: United States National Audiovisual Center

Pine Nuts -- A Food of the Paiute and Washo Indians

13 min col cost not given

Demonstrates how Indians process pine nuts, a nutritious food obtained from the Pinon tree of the Great Basin area. Shows how the nuts are extracted from cones, parched with hot coals, cracked on grinding stones, ground and eaten dry or drunk in a thin gruel.

Distributor: University of British Columbia

Old Antelope Lake

11 min b&w cost not given

Gives a sense of what's important to a Navajo and what isn't. Beginning at the source of the lake, the camera moves around the lake showing the unity between natural things and human beings in the environment.

Distributor: Center for Mass Communication

Activity 3: The Town

Where Have All The Farms Gone?

16 minutes 8 seconds color: Oxford, rental $25

Tumbledown, weatherbeaten, the old barns and dwellings stand like gaunt skeletons of other times, reproachful of an economy that let them down. Unable to compete with foodchain marketing, the farmers have moved into town. The film carries nostalgia in its mute question: What price progress?

Distributor: National Film Board of Canada

Power of My Spirit: The American Indian (Sound filmstrip) 1972

2 filmstrips/2 records (avg. 105 frames, 17 min) color

The filmstrips focus on the new Indianism, the movement by urban and reservation Indians to determine their own life-styles in the midst of the dominant American culture. Part of the Indian movement is the rediscovery by young Indians of the wisdom of the old tribal ways. The strips explore this experience with commentaries by serveral young Indians, who explain the importance of the past - the old traditions, the old languages.

Distributor: Denoyer-Geppert Audio-Visuals

Grand Canyon

col 26 min rent $20

Based on the writing of Joseph Wood Krutch, depicting the natural heritage of the West, basic geography of the canyon, conservation of natural beauty, and "primitive" Indian culture. Contrasting footage juxtaposes "primitive" and modern life in its treatment of the Havasupai Indian tribe. . . Ends with a look at man's well-intentioned but destructive tampering with nature.

Distributor: EMC #6916

Activity 4: The City

The Long Haul Men

16 min 42 seconds color: ACI

A drive with long distance truckers freighting produce over highways between Mexico, the western states and Calgary, Alberta. The film shows the diversity of country and climate that is the daily experience of the truckers, and the link that this type of transport forms between different parts of the continent.

Distributor: National Film Board of Canada

Transportation

filmstrip, Phoenix Indian High School

Series of filmstrips includes strips on air, land, water, and railroad transport.

Transportation

16 mm. film: Encyclopedia Brittanica

In this film, children will discover that there are many ways of getting people and things from one place to another.

Distributor: ANCER: #E-5-116

Skills in Transportation

16 mm. film: American Personnel and Guidance Association

Distributor: ANCER: #CE-49

A Career in Transportation

2 filmstrips, 2 cassettes: Assoc. Press

This program emphasizes the following major areas of transportation: Aviation, trucking, mass transportation, maritime shipping, railroading.

Distributor: ANCER: #H.10-0-28

The Evolution of American Industry

4 filmstrips, 2 cassettes: SVE

The creation of modern industrial America, social and economic development, natural resources and new frontiers, beginnings of American industry.

Distributor: ANCER: #H. 17-1

Introduction to Economics

5 filmstrips, 3 cassettes: EYEGATE

We are the economy, what we buy and sell, what is an economy, the economy of the community, financing a country.

Distributor: ANCER: #H.17.6

Activity 5: Mapping the Future

"What shall I be" series: Architect, Agribusiness

Pamphlets

Distributor: ANCER # RN 12, RN 53

The Homes We Live In, #1, 2, 3

6 filmstrips, 3 cassettes: SVE

Building a community, choosing and buying a house, moving into a house, building an apartment house, choosing and renting an apartment, moving into an apartment.

Distributor: ANCER

Boomsville

10 minutes 12 seconds color: LCA: $15

An amusing diagnosis of big city growing pains. Boomsville is an ironic view of town planning, or rather the lack of it, and what has happened to our cities as a result. Done in cartoon animation, the film trades the growth of the typical city, from a tiny settlement in the vast North American wilderness to the car-clogged metropolis that so many cities are today.

Distributor: National Film Board of Canada

Like Rings on Water

16 min 11 sec b & w Swedish Institute for Cultural Relations: $15

An English version of a Swedish film questioning the way our duties grow. Sitting beside a stream tossing pebbles, a man is reminded, by the spreading rings on the surface, of the similar pattern of urban sprawl--
What the alternative might be is shown in an animation sequence-- a design somewhat resembling a snowflake-- with the new city imagined as one of limited size and linked to satellite towns by roads radiating from the center.

Distributor: National Film Board of Canada

The City: Heaven and Hell

27 min 58 sec b & W Sterling: $14

An outline of the opposed natures-- creative and destructive-- of the city in history, the elements that created the first cities about five thousand

years ago, and the forces that now threaten "man's most precious collective invention."

Distributor: Contemporary/McGraw-Hill

The City and its Region

27 min 56 sec b & w Sterling: $14

History shows that cities thrive best when they live in harmony and balance with the countryside. How can this balance be maintained or restored in today's sprawling metropolitan regions?

Distributor: Contemporary/McGraw-Hill

The City and the Future

28 min 5 sec b & w Sterling: $14

An inevitable and urgent choice must be made-- low-grade urban sprawl or a new kind of regional city. This film examines prospects for the city and ways to restore its role.

Distributor: Contemporary/McGraw-Hill

WHERE TO ORDER ADDITIONAL RESOURCES

Apache-Navajo Career Education Media Center (ANCER)
P.O. Box 749
St. Johns, Arizona 85936
available to schools in Navajo and Apache Counties in Arizona

Contemporary/McGraw-Hill Films
1221 Avenue of the Americas
New York, N.Y. 10020

Encyclopaedia Britannica Education Corp.
425 North Michigan Avenue
Chicago, Illinois 60611

Extension Media Center (EMC)
University of California
Berkeley, Ca. 94720
"available to colleges, schools, institutions, industries, responsible (?) individuals, and organizations for use within the United States"

National Film Board of Canada
16th Floor
1251 Avenue of the Americas
New York, N.Y. 10020
sells (but does not rent) films for use within the United States

Note: rental prices may have changed from those listed here.

Bibliography

These books are recommended for use in conjunction with the unit as a whole:

American Heritage: The American Heritage Book of Indians, N.Y.: Simon and Shuster, 1961
A pictorial history of North American and some South American tribes from prehistoric times to the present. Includes arts and crafts, history, and culture. Some Jr. High students may find reading level difficult.

American Indian Historical Society: The American Indian Reader: History (available from: The Indian Historian, 1451 Masonic Ave., San Francisco, Ca. 94117, $4.00 # ISBN 0-913436-19-4)
Indian history from an Indian point of view, covers main crises of Indian history. Written for adults.

Bahti, Tom: Southwestern Indian Tribes, C.K Publications, Box 14883, Las Vegas, Nevada, $2.00.
Excellent summaries of history and culture of 38 southwestern tribes. Good photographs and suggested reading lists for each tribe.

Baldwin, Gordon C.: Ancient Ones, N.Y., Norton & Col, Inc., 1963.
Well written and interesting reference on the ancient peoples of the four corners country.

Bauer, Helen: California Ind an Days, N.Y.: Doubleday, 1963.
A lively and carefully researched picture of the life of the California Indians from earliest times to present. Intended for elementary school readers.

Boyce, George A., When Navajos had Too Many Sheep: The 1940's. (available from: The Indian Historian, 1451 Masonic Ave., San Francisco, Ca. 94117, $5.00 # ISBN 0-913436-13-5)
Story of how one tribe survived a crisis involving relationship of economy to natural resources. Also covers education, housing, health, economy and includes illustrations and maps. Written for adults.

La Farge, Oliver: The American Indian: Special Edition for Young Readers. N.Y., Golden Press, 1973, $3.95.
Lavishly illustrated coverage of North American tribes, by region. Includes art, culture, history. Includes chapter on the Indian today.

Weaver, Thomas, ed. Indians of Arizona, University of Arizona Press, 1974.
Covers Arizona tribes from prehistoric to present times. Written for adults.